FOUNDED IN 1856

RAILWAY AGE

OCTOBER 23, 1948

Transportation Library

NOV 1 1948

NOT MUCH GLAMOUR . . . BUT

LOTS OF PULL!

THIS husky 2000 horsepower General Motors Diesel has the highest tractive effort of any Diesel transfer locomotive built today — 81,600 pounds continuous T.E. at 7.2 m.p.h. with 65:12 gear ratio. It's one of a fleet of General Motors Transfer Locomotives used by the Illinois Central for heavy-duty transfer work in the Chicago area.

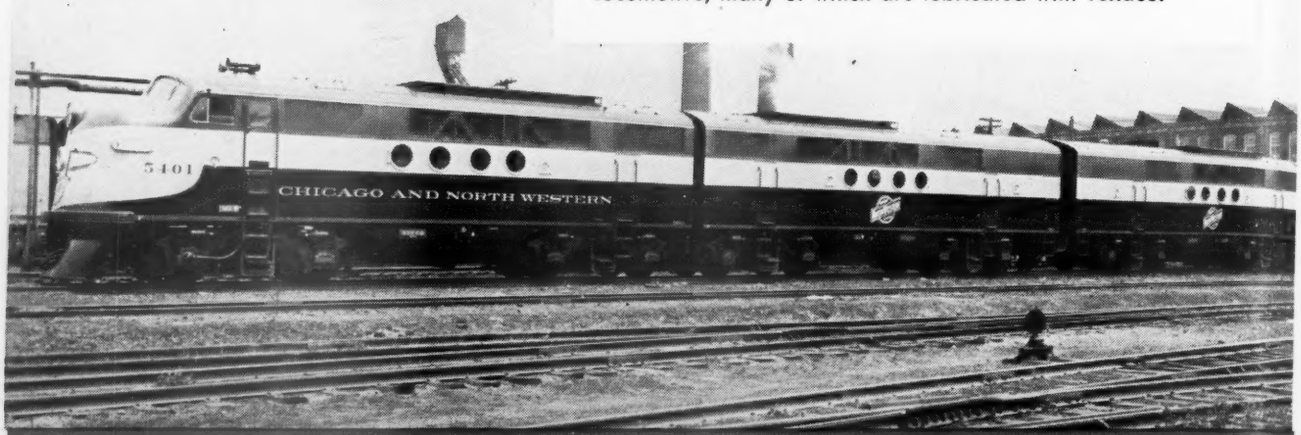
ELECTRO-MOTIVE DIVISION GENERAL MOTORS LA GRANGE, ILL.

Home of the Diesel Locomotive

GENERAL MOTORS LOCOMOTIVES

SALUTING C&NW's CENTENNIAL

Texaco congratulates the Chicago and North Western Railway System on its 100th birthday . . . and salutes its many achievements in progressive railroading through a century of service. Photo shows a C&NW modern Diesel electric freight locomotive, many of which are lubricated with Texaco.



They Get Greater Efficiency

RAILROADS everywhere keep their Diesels cleaner . . . keep cost of maintenance lower . . . by lubricating with Texaco.

For instance, *Texaco Dieseltex HD* . . . a complete, improved line of railroad Diesel engine lubricants . . . is especially made to prevent sludge, varnish and carbon formations. *Texaco Dieseltex HD* is detergent and dispersive . . . with an exclusive, new heavy-duty additive to give greater resistance to oxidation.

Texaco Dieseltex HD gives full protection to all engine parts . . . and it more than meets the most stringent requirements of leading Diesel railway engine builders.

Only Texaco offers a systematic engineering service, with tests and controls that permit quick, positive evaluation of both engine and lubricating oil. Let a Texaco Lubrication Engineer give you details. Call the nearest Railway Sales Division office listed below, or write The Texas Company, *Railway Sales Division,* 135 East 42nd Street, New York 17, N. Y.

NEW YORK • CHICAGO • SAN FRANCISCO • ST. PAUL • ST. LOUIS • ATLANTA

TEXACO

TEXACO Dieseltex HD

FOR ALL RAILROAD DIESELS

Tune in . . . TEXACO STAR THEATRE every Wednesday night starring Milton Berle. See newspaper for time and station.

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year, U. S. and Canada. Single copies 50 cents each. Vol. 125, No. 17.

Vol. 125, No. 17 October 23, 1948

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

IN THIS ISSUE

EDITORIALS:

"Fully Drunk, Full Pay" 29

Is The Big Job Being Neglected? 30

1948 A Car-Retarder Year 31

COMMUNICATION 49

GENERAL NEWS 53

REVENUES AND EXPENSES 65

GENERAL ARTICLES:

New B. & O. Yards Save Time and Money 32

Missouri Pacific Gets New Air-Brake Instruction Car 38

Voters to Rule on Featherbedding 41

Diesel Shop Shows Advances in Design 42

Diner Loss Mounts Despite Improving Operating Ratio 48

Traffic Diversion Cause for Alarm 50

Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn., with Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 105 W. Adams Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building— Cleveland 13: Terminal Tower—Seattle 1: 1038 Henry Building—San Francisco 4: 300 Montgomery Street, Rooms 805-806—Los Angeles 14: 530 West 6th Street—Dallas 4: 2909 Maple Avenue.

Samuel O. Dunn, Chairman and President. James G. Lyne, Executive Vice-President. S. Wayne Hickey, C. Miles Burpee, H. H. Melville, C. W. Merriken, F. C. Koch, R. E. Thayer, H. E. McCandless, Vice-Presidents. John R. Thompson, Western District Sales Manager. J. S. Crane, Vice-President and Secretary. J. T. DeMott, Treasurer. Ralph E. Westerman, Arthur J. McGinnis, Assistant Treasurers.

C. Miles Burpee, Business Manager.

Subscriptions including 52 regular weekly issues, and special daily editions published from time to time in New York or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, $6.00; 2 years, $10.00; other countries not including daily editions: in Western Hemisphere 1 year $10.00; 2 years $16.00; other countries 1 year $15.00; 2 years $25.00. Single copies, 50 cents each, except special issues.

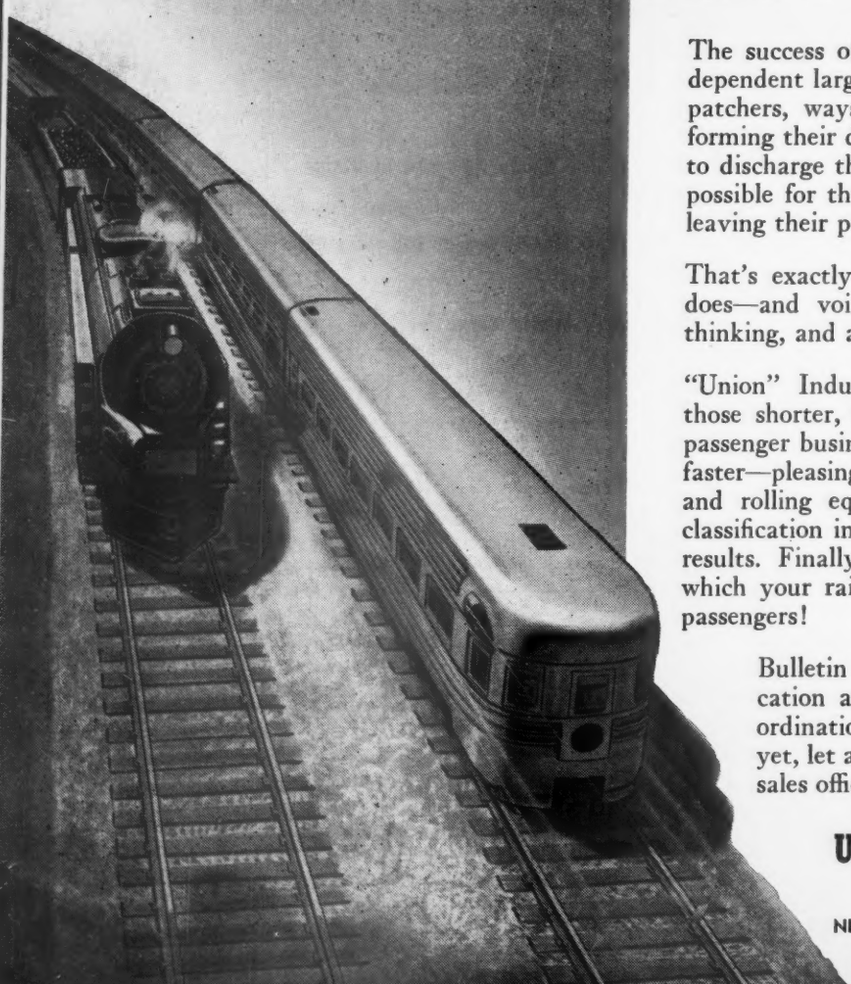
H. E. McCandless, Circulation Manager, 30 Church Street, New York 7.

Railway Age is a member of Associated Business Papers (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service.

PRINTED IN U.S.A.

Closer co-ordination for Better Railroading...

with "UNION" I.T.C!



The success of your plans for improving operating efficiency is dependent largely upon the facilities which you provide your dispatchers, wayside operators, enginemen and trainmen for performing their duties. There's no better way to insure their ability to discharge their operating duties effectively than by making it possible for them to confer instantly and conveniently—without leaving their posts of duty.

That's exactly what "Union" Inductive Train Communication does—and voice communication co-ordinates their knowledge, thinking, and actions for better railroading!

"Union" Inductive Train Communication can help maintain those shorter, faster schedules with which you are bidding for passenger business. It can reduce delays and get freight through faster—pleasing consignee and shipper, increasing track capacity and rolling equipment availability. It can speed freight car classification in your hump or flat yard, with the same desirable results. Finally, it can augment the effectiveness of other facilities which your railroad uses for the comfort and well being of its passengers!

Bulletin 160 explains "Union" Inductive Train Communication and many of its features which assure better co-ordination for better railroading. Write for it—or, better yet, let a representative from your nearest "Union" district sales office give you full particulars.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

UNION I.T.C. The Voice of Experience in Train Communicatio

WEEK AT A GLANCE

TRAFFIC DIVERSION CAUSE FOR ALARM: A variety of causes —Ex Parte 166 rate increases, the recent basing-point decision, high minimum carload weight requirements, etc.— are combining to produce a substantial diversion of railroad freight traffic to highways and waterways. While lack of statistics concerning other forms of transportation makes it impossible to present a definite picture of the extent of this diversion, *Railway Age* has assembled a number of individual instances, summarized in an article on pages 50-52, which are indicative of the general trend.

B. & M. DIESEL SHOP: A new Diesel locomotive terminal built by the Boston & Maine at Boston, Mass., although conforming in most respects to basic design elements generally associated with such structures, also incorporates many distinctive features intended to place the servicing and maintenance of Diesels on a high level of efficiency. This heavily-Dieselized New England road's new facility is described in detail in an illustrated article which starts on page 42. At the same time, one of our editorials calls attention to the fact that there are still a lot of steam locomotives "chuffing over this country," and that real study and attention must be given to facilities and methods for maintaining them if costs are to be held to reasonable levels.

SOMETHING FOR NOTHING: Diversion of railroad freight traffic to highway carriers, referred to above, could only be sharply accentuated if the "something-for-nothing" program of truck "taxes" favored by the American Trucking Associations, as reported in our news pages, should be generally adopted. While advocating "expeditious development of . . . highways at appropriate high standards," (but no toll roads) the long-distance commercial truckers ask that they be exempted from virtually all taxes, fees and licenses except a state gasoline levy. They likewise oppose "diversion" of highway "taxes" to other uses, but openly advocate "diversion" of general revenues to highway purposes—a proposal which strikes us as being as selfishly Communistic as anything emanating from the Kremlin.

I.C.C. "MONTHLY COMMENT": Our regular review of the Interstate Commerce Commission's "Monthly Comment" begins on page 48. In it we summarize the commission's discussion of such varied topics as dining car operating ratios, holdings of railroad securities, stock yields, freight-rate increases, fuel purchases and prices and the age of freight cars.

AIR-BRAKE INSTRUCTION: An illustrated article beginning on page 38 describes a new air-brake instruction car recently placed in service by the Missouri Pacific. This "classroom on wheels" provides opportunity for motive-power employees to learn more about air-brake operation and maintenance; and for enginemen and firemen to pick up many pointers on smooth handling of both passenger and freight trains. Equipment for making running tests while the car is en route from place to place is also provided.

RETARDERS SAVE TIME AND MONEY FOR B. & O.: Substantial reduction in operating expenses and faster classification of some 2,300 cars a day will result from the Baltimore & Ohio's expenditure of $2,000,000 to rebuild and retarder-equip two gravity yards at Willard, Ohio. This project, and the strategic importance of the yards affected, are fully described, with illustrations and maps, in an article beginning on page 32. The editorial, "1948 A Car-Retarder Year," on page 31, discusses the renewal of interest in retarder-equipped classification yards, and the advantages resulting therefrom.

"FULLY DRUNK, FULL PAY": Our principal editorial this week calls forceful attention to the recent decision of a National Railroad Adjustment Board referee requiring reinstatement with *full* pay for nearly three years of a locomotive fireman who, by his own silence and the testimony of his fellow employees, was dangerously intoxicated while on duty—a decision which may well become more notorious than the infamous "half-drunk, half pay" case. The editorial urges the railroads to adopt more forthright and effective methods of calling public attention to this potentially dangerous situation, so that Adjustment Board referees will place their obligation to protect public interest in safe railroad operation at least on a par with their sympathy for delinquent employees.

"FEATHERBEDDING" VOTE: Californians who go to the polls on November 2 will have a chance to vote on a proposal to amend that state's antiquated "excess crew" law, which is costing California railroads about $3,000,000 a year, and preventing them from taking full advantage of many technological improvements. A short article on page 41 reviews the history and present disadvantages of this ill-advised and outmoded statute, and summarizes the widespread opposition to it among many diverse groups.

HIGHLIGHTS: Highlights in the week's news of special interest to railroaders include President Truman's decision to appoint an emergency fact-finding board to investigate the wage demands of the non-operating brothers; denial by the Interstate Commerce Commission of an l. c. l. rate increase in Eastern territory; and the Chicago convention of the American Short Line Railroad Association. These and other developments are duly reported in our news pages, which also include statistical tables showing railroad operating revenues and expenses for August and the first eight months of 1948.

AN IMPORTANT LINE

NOTICE THE minor corrugations in the *Standard* Improved Dreadnaught End illustrated below. Note that they form a *continuous line* across the end of the car. Stress Engineers do not need to be told of the importance of such a structural feature . . . it means *stronger* construction for *equal* weight. Note also that the corrugations extend *around* the corners—another *Standard* improvement for strength, light weight and durability. Specify *Standard* Improved Dreadnaught Ends and other *Standard* Car Specialties for *high* performance . . . *low* maintenance!

STANDARD RAILWAY
EQUIPMENT MANUFACTURING CO.

"The World's Largest Fabricators of Railway Car Specialties"

310 South Michigan Avenue, Chicago 4 • 247 Park Avenue, New York 17

RAILWAY AGE

EDITORS . . .
Samuel O. Dunn and James G. Lyne

MANAGING EDITOR . . .
C. B. Tavenner

WESTERN EDITOR . . .
Neal D. Howard

NEWS EDITOR . . .
Gardner C. Hudson

WASHINGTON OFFICE . . .
Walter J. Taft
Sherman Davis

TRANSPORTATION DEPARTMENT . . .
William H. Schmidt, Jr.
Robert G. Lewis

MECHANICAL DEPARTMENT . . .
C. B. Peck
E. L. Woodward
H. C. Wilcox
C. L. Combes
G. J. Weihofen

ENGINEERING DEPARTMENT . . .
M. H. Dick
Walter L. Turner, Jr.
Henry E. Michael
Norris V. Engman

PURCHASES & STORES DEPARTMENT . . .
John W. Milliken

EQUIPMENT & FINANCIAL NEWS . . .
Fred C. Miles

SIGNALING AND COMMUNICATIONS DEPARTMENT . . .
John H. Dunn
Maurice Peacock

ELECTRICAL DEPARTMENT . . .
Alfred G. Oehler

WESTERN NEWS DEPARTMENT .
George R. Johnson

ASSOCIATE EDITOR . . .
Charles Layng

LIBRARIAN . . .
Edith C. Stone

EDITORIAL ASSISTANT . . .
Elaine C. Farrar

"FULLY DRUNK, FULL PAY"

For several years the principle of "half-drunk, half pay" has been an ironical by-word on the railroads, accurately characterizing the flippant irresponsibility of referees of the National Railroad Adjustment Board in their zeal for finding means of resolving disciplinary cases in favor of complaining employees. The phrase, of course, refers to a referee's decision whereby an employee, dismissed for drunkenness, was reinstated with half-pay for the time lost, on the ground that he was only partly drunk. In accordance with this brand of logic, peculiar to the referees of this board, it would not unnaturally follow that, if an employee were discharged for being fully drunk, he ought to be reinstated with full pay. Believe it or not, a referee has recently handed down just such a decision—although, of course, he found a somewhat more plausible explanation than this for his action.

As most railroad people—but few others—know, when a railroad employee is dismissed or otherwise disciplined for cause, he has the privilege of appealing his case to this National Adjustment Board, whose members are equally divided between representatives of the unions and management. When the board splits 50-50, as frequently happens, a supposedly "neutral" referee is called in (named, usually, by the National Mediation Board) to break the tie and decide the case. The result is that all the really "tough" cases are decided by these referees, who have no limitations of law or precedent which they are obliged to observe in arriving at their findings. Perhaps it is a coincidence, and again perhaps it is not, that those referees who most frequently decide these disputes for the claimants appear to be the ones who are reappointed time and again to these jobs.

One day in October, 1945, on a relatively small railroad in the Southeast, a locomotive fireman, according to testimony of his fellow-employees which the accused did not deny, was intoxicated and took the operation of the locomotive away from the locomotive engineer at the point of a knife. Witnesses also said that he pulled a knife on the conductor and threw a brakeman off the locomotive. In September, 1948—almost three years later—the Adjustment Board (actually, of course, the referee assigned to break the tie of the board members) decided that this employee must be reinstated in the job from which he was dismissed and that the railroad must pay him his regular wages for all the intervening period since he was discharged.

This amazing decision was based by the referee on the failure by the railroad's management to observe the referee's notion of proper protocol in conducting its investigation which led to its determination that the employee should be dismissed. The management, it seems, secured written state-

ments from witnesses as to the behavior of the accused in advance of the formal hearing into the charges against him. The referee did not approve this procedure, so he sustained the claimant, without even considering whether he was actually drunk or not, as charged and not denied.

Where does the traveling and shipping public come off in such a decision as this? In what direction is the railroads' proud record of safe operation likely to go when a pedantic referee may, and does, require a railroad to entrust the property, and possibly the lives, of its customers to the care of an employee who has no more sense of his responsibility than the evidence indicates was possessed by the employee who initiated this litigation?

If this were the only case of its kind to be decided in this peculiar manner by these referees, the precedent would be disturbing but not necessarily disastrous. Unfortunately, as previously noted in these pages, referees are deciding more and more disciplinary cases in favor of delinquent employees. Activated, no doubt, by praiseworthy sympathy for the unfortunate employee whose job is jeopardized, they seem to have forgotten entirely their much more important obligation to protect the public interest in safe operation of the railroads.

This same referee—on the very day when he ordered the reinstatement of the fireman charged with drunken violence in the case already cited—required a railroad in Indiana to reinstate a discharged conductor who had been drunk on duty to the point of being incapable of doing his work, and who admitted the accusation. The referee based his order to the railroad calling for the reinstatement of this delinquent employee on the grounds that the punishment of dismissal was unduly severe—this in spite of the railroads' well-known "Rule G" which establishes this penalty for even the slightest infringement of the ban on alcoholic beverages by employees whose duties involve the safety of train operation; and of which every employee is fully aware when he accepts employment.

An objective student of labor economics, Professor Sumner Slichter of Harvard, has observed of the National Railroad Adjustment Board that "some of its decisions are among the strangest in the annals of industrial relations"—which is surely a moderate statement. Nevertheless, these "strange" decisions are continuing, and there is no prospect that they will terminate, unless and until the railroads adopt more forthright and effective methods than they have done so far to bring this dangerous situation to the attention of the public. It might turn out to be very embarassing to the railroads—in the absence of a vigorous *public* protest on their part at the time they are forced to reinstate delinquent employees—if one of these employees, later on, should become a factor in a serious train accident.

IS THE BIG JOB BEING NEGLECTED?

At the recent meetings of the Coordinated Mechanical Associations at Chicago, where motive power was discussed, emphasis lay mainly on the Diesel-electric locomotive and the problems connected with its maintenance. Those in attendance, however, were reminded from time to time during the course of the three-day meeting that the steam locomotive still represents the largest part of the motive power inventory of American railroads—84 per cent, to be exact. John M. Hall, director, Bureau of Locomotive Inspection, Interstate Commerce Commission, remarked before making an address at one of the meetings that "just so that we won't bow out the steam locomotive at this time, I want to say that in our reports in September of this year we showed a total of 37,024 steam locomotives still chuffing over this country, and they won't all be out of the picture in the next six months."

A lot of people in the railroad business seem to have forgotten the problem of maintaining 84 per cent of the inventory and are concentrating most of their attention on the Diesel. Several chief mechanical officers took occasion to remark that the steam locomotive is going to be with us for a long time and that, if real study and immediate attention are not given to the facilities and the methods for maintaining steam power, the railroads can expect nothing less than to have the maintenance costs of the major part of their motive power inventory rise to a degree that may jeopardize profitable railroad operation.

The true picture of the relative status of steam and Diesel is nowhere better illustrated than in the statistics of switching power, for it is in this field that the Diesel first entered the picture and has made its greatest strides. Yard switching, in freight service, represents about 85 to 90 per cent of all of the switching operations, so the statistics of freight switching operations and the motive power with which it is conducted should be significant.

In 1941, for example, there were 8,159 switching locomotives, 12 per cent of which were Diesel and 87 per cent steam—the remainder were electric. In that year the Diesels did 11 per cent of the work (based on yard switching-hours, freight service) and the steam, 89 per cent of the work. At that time there were over 12,862 locomotives assigned to yard switching operations, freight service, indicating that locomotives other than the switching type are used in switching work.

In 1945, the total number of switching locomotives had increased to 9,117 of which 24 per cent were Diesel and 74 per cent steam. In that year the Diesel performed 24 per cent of the yard

switching hours in freight service and the steam 74 per cent. The total number of locomotives assigned to yard switching operations was 13,692.

In 1947, the total inventory of switching locomotives was 8,820, 33 per cent of which were Diesel, and 66 per cent steam. In that year 31 per cent of the yard switching-hours were performed by Diesels and 67 per cent by steam. Total locomotives assigned to yard switching numbered 13,245.

The total number of steam switching locomotives decreased from 7,113 in 1941 to 5,922 at the end of 1947 while Diesel switchers increased from 1,046 in 1941 to 2,891 at the end of 1947.

Several significant facts stand out in these statistics. One is that, even in switching service—the stronghold of the Diesel—66 per cent of the inventory is still steam and 67 per cent of the biggest part of the job—freight switching—is still done by steam. Another is the fact that the railroads have an increasing amount of work to do and the expectations, or hopes, are that there will be a relatively high volume of traffic for some time to come. The statistics cited indicate the replacement rate of motive power and the relation of both types of motive power to the job done.

In the face of such figures it is difficult to see just how some railroad people can ignore the fact that obsolete shop and engine-terminal facilities for steam motive power cannot be continued in service much longer without increasing the cost of maintaining motive power. Some executive and mechanical officers have gone so far as to say that their roads will spend relatively little money hereafter on new facilities for the maintenance of steam power—yet they should know that, on the larger roads, at least, steam power is going to have to be operated and maintained for many years. There has been a lot of rather free discussion about replacing all steam locomotives with Diesels. This is just wishful thinking because there are many factors which make such a course impracticable, even though it might be desirable.

It is worth while repeating again that at today's high labor rates, obsolete facilities which consume man-hours cannot be tolerated. The discussion at the Chicago meetings indicated the desperate need of some railroads for trained men and the immediate necessity of setting up training courses to equip new men for the jobs that are ahead. Under such circumstances the railroads just cannot afford to waste man-hours. And the prospect of a further increase in the several hundred million dollars now spent each year in repairs to steam cannot safely be ignored. Some comprehensive program for the modernization of shop and engine terminal facilities during the next few years is definitely needed. The alternative is to look forward to an increase in the per-mile cost of maintaining steam power—the principal basis of comparison.

1948 A CAR-RETARDER YEAR

During the present calendar year, six more gravity-type freight classification yards will have been equipped with car retarders, this number having been equalled only in 1926 and 1927, and exceeded only in 1929 when ten yards were so equipped. Retarders were invented and developed in 1924 and 1925, and the first projects using commercial retarders were placed in service in 1926. About 30 large yards were equipped in the years 1926 to 1930, inclusive. During the depression and World War II (1931 to 1947 inclusive), projects of this nature were limited to 16 yards. Now that railroad managements can again consider large-scale improvements on a long-term basis, interest is again being shown in car retarder projects.

Some of the gravity yards built entirely new in 1948, or reconstructed to include retarders, are the Union Pacific yard at North Platte, Neb.; the Rock Island yard at Armourdale, near Kansas City, Mo.; the Santa Fe yard at Argentine, Kan., near Kansas City; the Chesapeake & Ohio yard at Walbridge, Ohio, near Toledo; and the two Baltimore & Ohio yards at Willard, Ohio. Other similar projects are being planned, for example, on the Canadian Pacific at Montreal, Que. This large-scale renewed interest in the construction of new gravity-type classification yards is evidence of recognition on the part of railroad managements that modern yards not only reduce operating expenses to the extent of paying good returns on investment, but also that the time saved in getting cars through such yards reduces the overall time between the shipper and the consignee.

Retarders are only one of numerous factors in a large yard project, but they are the key facility that makes it practicable to hump cars at a higher average speed, and to operate the yard at this higher speed at all times, regardless of adverse weather. A further advantage is that the yard can be operated by a comparatively few trained men, with low operating expense, which permits classifications to be made as trains arrive throughout the entire 24 hours every day, rather than limiting operations to certain tricks, and thereby delaying cars in transit.

Yards differ in layout and operating conditions, so that no general rule can be applied concerning costs of improvements or savings to be effected, but a study can be made beforehand to determine these factors. The new yard facilities completed last year by the Union Pacific at Pocatello, Idaho, cost $2,618,985. Details of construction, and results accomplished, were explained in the *Railway Age* of January 10. Reconstruction of two yards on the B. & O., at a cost of $2,000,000, is described in this issue with a summary of benefits derived. Similar results could doubtless be achieved in other yards.

All of the power switches and retarders in the eastbound yard are controlled by one machine in a tower near the lead down the hump

NEW B. & O. YARDS SAVE TIME AND MONEY

The car is starting through the retarder on the lead down the hump

At Willard, Ohio, the Baltimore & Ohio has rebuilt two large gravity-type classification yards, at a cost of approximately $2,000,000, to get trains through these yards more quickly and facilitate that road's "Sentinel Service" to shippers. In addition to accomplishing this result, the enlarged facilities have substantially reduced operating expenses at this point, where approximately 2,300 cars are handled daily.

The principal features of the yard projects included regrouping the tracks, revision of grades, and installation of power switch machines, car retarders and floodlights, as well as various forms of modern communication, such as teletypes, loud-speakers and radio. A major item was the consolidation of two eastbound yards, together with extensive track changes under traffic. In the westbound yard, track changes were limited to the area down the hump and through the switches and retarders. The project also included new yard office buildings and other auxiliary improvements.

Why Big Yards at Willard

Willard is 278 mi. east of Chicago on the Baltimore & Ohio's main route east through Akron, Ohio, Youngstown, and Pittsburgh, Pa., to Washington,

In the yardmaster's office the Telespatch is in use. Also shown are the teletype page transmitter on the table and the radio control panel on the wall between the windows

Two projects at Willard, Ohio—including new grades, grouping of tracks, and installation of retarders, floodlights, teletypes, loudspeakers and radio—expedite operations and help reduce operating expenses

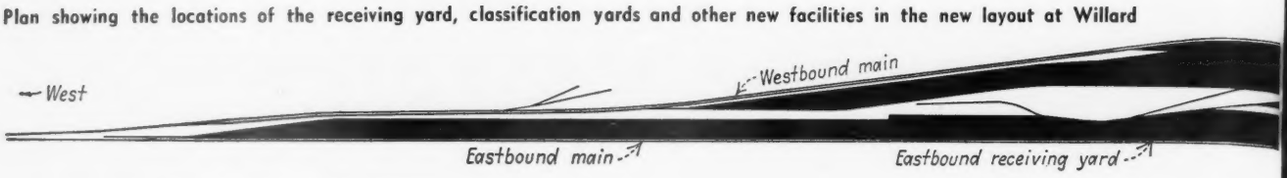
---

D. C., Baltimore, Md., Philadelphia, Pa., and New York. The reason for the extensive improvements at this point is that Willard is the hub of the road's freight operations throughout a large area between Pittsburgh and Chicago, involving five operating divisions. Furthermore, within the operating scope of the Willard yard, the B. & O. has three north-and-south lines from ports on Lake Erie to cities and coal fields in southern Ohio, West Virginia and Kentucky.

For example, one north-and-south line from Cleveland, Ohio, and Lorain crosses the main line at Sterling, Ohio, 49 mi. east of Willard, and extends on south through Holloway, Ohio, to Wheeling, W. Va., where connections are made with other divisions. A line from Sandusky, Ohio, crosses the main line at Willard, and extends south to Newark, Ohio, with connections to Columbus, Zanesville, Wheeling, and Parkersburg, W. Va.—Parkersburg being on the B. & O. east-and-west route between St. Louis, Mo., and Baltimore. The Toledo division, from Toledo, Ohio, crosses the main line at Deshler, Ohio, 62 mi. west of Willard, and extends south through Lima and Dayton to Cincinnati.

Thus, the classification yards at Willard handle traffic not only east and west on the Chicago-Pittsburgh line, but also a certain amount of traffic to and from the three north-and-south lines. For example, each day about 250 cars of coal from points south of Holloway, on the Wheeling division, are routed north to Sterling, then west on the Akron division to Willard to be classified, and then are routed west to North Baltimore, Ohio, and north over the Toledo division to Toledo. Traffic from Toledo goes south to North Baltimore and east to Willard, and traffic from Lima goes north to Deshler and east to Willard. On the Newark division, all northbound traffic is classified at Willard and southbound trains are made up at and

Plan showing the locations of the receiving yard, classification yards and other new facilities in the new layout at Willard



depart from Willard. Local freight service only is operated between Willard and Sandusky.

Thus, cars classified at Willard come from five or more routes, and depart on the same number of routes. Approximately 1,300 eastbound cars are handled daily and are separated into 32 classifications. The westbound classification yard handles cars for the lines west to Chicago, west and north to Toledo, and west and south to Lima. About 900 westbound cars pass through this yard daily, these being separated into about 20 classifications.

Two Eastbound Yards into One

The most expensive and complicated phase of the project was to consolidate the two previous eastward classification yards into one. Previously, eastbound quick-dispatch freight was classified in a gravity-type yard with 10 tracks. Other eastbound freight, such as empty coal cars, was classified in a separate yard with 21 tracks. The humps of these two yards were approximately 450 ft. apart in an east-and-west direction and about 200 ft. apart in the north-and-south direction.

Use of the two eastbound yards requires the movement of cuts of cars between them, an operation unsuited to present operating practices. In the rearrangement the two previous humps were removed, a new one was built about midway between them, and the tracks and switches were adjusted to form a new eastbound yard with 32 classification tracks, including two tracks at an icing platform in the former quick-dispatch yard.

In order to adapt the new yard for the use of car retarders, the grades down the hump were designed to accelerate the speed of cars quickly, and thereby increase the distance between cars or cuts of cars so that time and distance are available in which to operate power switches. These grades are shown in the accompanying profile.

In the old yards the yard tracks were connected to ladders down both sides. In the new yard the tracks are arranged in four groups. To increase the length of the yard tracks, the first two switches in each group are lapped. The turnouts are No. 8 with 13-ft. points, except for the laps in which the combined frog is a special design, and the other two are No. 8 and No. 10. With this lap arrangement, the distance from the first switch to the most distant clearance point on all six tracks can be as short as 275 ft. with tracks at 13-ft. centers. One retarder is installed on the track to each of the four groups, and one retarder is on the main lead down the hump, thus requiring only five retarders for the entire yard of 30 tracks used regularly for classifications and two ice-house tracks. New 131-lb. rail and frogs were installed down the hump and through the retarders and switches to the clearance points.

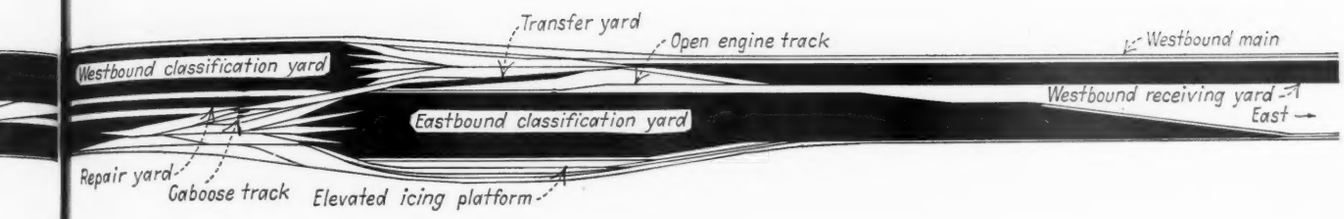
In order to consolidate the two eastward yards into one, revise the grades and the track layouts, and build the new hump, the area in the vicinity of the switches was lowered about 6 ft. and the lower end of the yard was filled to a maximum of about 2 ft. Roughly about 90,000 cu. yd. were excavated at the upper end, and about 40,000 cu. yd. of fill were required at the lower end. After the grading was completed, about 40,000 cu. yd. of cinders were applied as ballast and for walkways.

All grading and filling, as well as the rearrangement of tracks and the installation of power switch machines and retarders, was done under traffic by taking a few tracks out of service at a time. The grading was done with off-track machines. Excavation near the hump end of the yard extended into clay, where serious drainage problems developed that required the installation of additional drains. The drains installed were largely Armco corrugated iron pipe, ranging from 8 in. to 12 in. in diameter. To conform to the new grade of the yard tracks, the car-icing platform, which is 1,125 ft. long, was raised about 3 ft.

Electric Retarders

The power switches and car retarders in this yard are Type B electric, furnished by the General Railway Signal Company. These retarders are all of the double-rail type, and each unit, consisting of a section 38 ft. 6 in. long, is operated by a seperate mechanism controlled by a separate lever. The retarder on the main lead down the hump has three units totaling 115 ft. 6 in., and each of the four retarders on the separate leads to groups has two units totaling 77 ft. Thus the five retarded locations include 11 units totaling 423 track feet.

The 34 switches in the eastbound classification yard are operated by Model 6 electric switch machines, a type designed for this service. These are highspeed machines and operate in approximately one sec. No lock rods are used, and each machine is arranged so that it can be trailed through without damage, if such an unauthorized move is made in error. Since in such cases the switch points are moved by the action of the wheels and not by action of the switch machine, the leverman must operate the lever to again control the switch. An additional feature is that the machine will complete its stroke, even if a car enters the detector track circuit while the switch is moving. At each switch there is a Type P color-light switch target that indicates the position of the switch. This target dis-

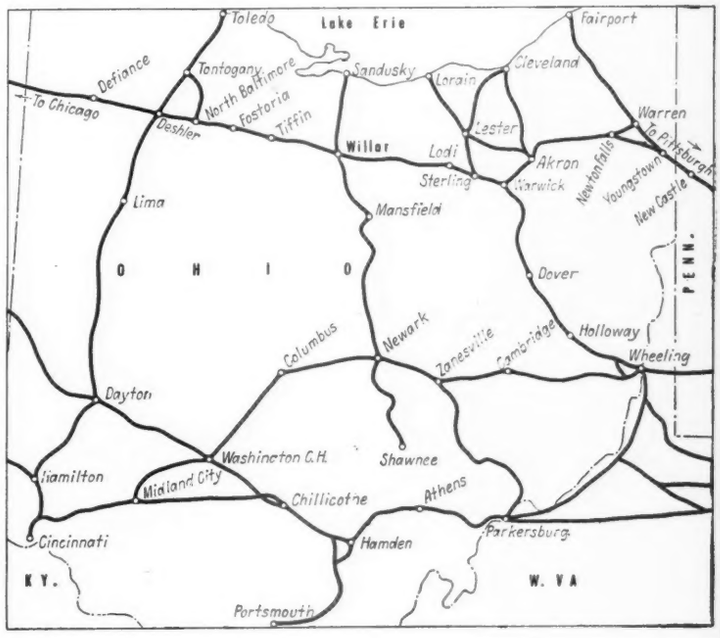


plays lights in both directions; green when the switch is normal, and yellow when reversed.

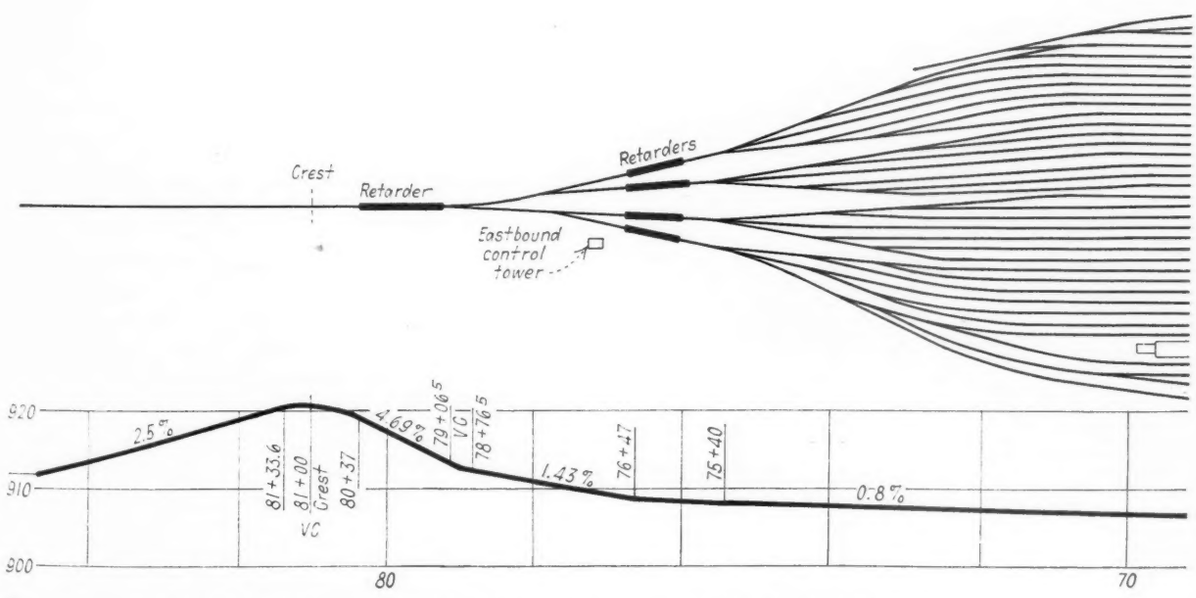
All power switches and retarders are controlled from one machine in a three-story tower at the south side of the yard tracks. This tower is of brick construction, 14 ft. by 16 ft. in plan. A special feature is the use of large-size fixed windows of ¼-in. "Solex" plate glass. These panes are 50 in. high, and are set at an angle, with the bottom edge 6 in. closer to the inside wall than the top. This practice aids further in reducing glare. A narrow platform, accessible from a side door, extends around three sides of the tower to facilitate washing the windows.

The control machine is of the console type, with a sloping top including 11 retarder levers and 34 switch levers, all of which operate away from or toward the operator. The retarder levers normally stand in the raised position to control the retarder to the open position. Each lever can be moved toward the operator to four other positions, which control the corresponding retarder to close with increasing pressure, depending on the lever position. When the lever is pushed back to its normal position, the retarder opens at once.

The switch levers are in the lower row. Each lever normally is in the raised position, setting its switch in the normal position, indicated by a green lamp above the lever. The lever is pulled to reverse the switch, and when the switch operates the green lamp above

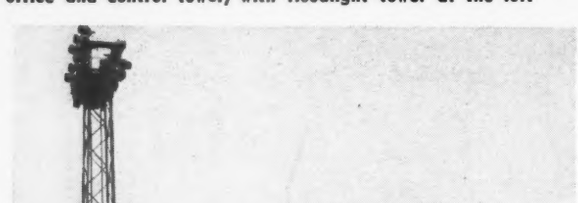


The principal Baltimore & Ohio lines in Ohio, showing how classification work is concentrated in new yards at Willard



Plan and profile of tracks down the hump and through the switches and retarders in the eastbound yard

Looking east through the middle of the eastbound yard (above), showing power switch in the foreground. Below—The yard office and control tower, with floodlight tower at the left



the lever is extinguished and a yellow lamp is lighted. There is no locking between these levers, and the operator is free to move them at any time. A switch will not start to operate, however, if a car is occupying the detector locking track circuit which extends through the switch. The track circuits are long enough to prevent the operation of a switch between the trucks of a car.

Yard Signals

At the crest of the hump there is a color-position-light signal directed toward the receiving yard. This signal displays red for Stop; yellow for Hump Medium; green for Hump Fast; lunar white for Hump Slow; and flashing red for Back Up. Three marker lights above the signal units direct which of two or more engines is to hump cars. Ordinarily the signal is controlled by the conductor of the crew which is pushing cars over the hump, who is stationed at a shelter at the hump. However, the employee in the retarder control tower also can control this signal to the Stop aspect if he sees some condition in the yard that requires that the humping be stopped at once.

Several Forms of Communications

Also at the crest of the hump is a trimmer signal which is faced toward the classification yard. This is controlled by the hump conductor to display red for "stop trimming and get in the clear," or lunar white for "proceed with trimming." If the trimmer signal is displayed the "trim" aspect at the same time the hump signal is displaying a Proceed aspect for a string of cars to be pushed from the receiving yard up to the hump, the hump signal will change its aspect from Proceed to Stop automatically when the leading car enters a track circuit about 300 ft. from the crest.

In addition to ordinary telephone service, the new

yard project includes loud-speakers, intercommunication equipment and teletypes, and radio is installed on the nine switch engines used in yard service. Large-size, 28-in., outdoor-type Western Electric loud-speakers are located at several points—for example, at the east end of the yard where trains are made ready for departure; at the far end of the classification tracks where men are located to place skates on the yard tracks to establish the head end of classification; on the east side of the control tower to reach men working in that area; and at the crest of the hump. A microphone in the yardmaster's office can be connected to any of these loudspeakers to issue instructions as required. Also, on the same circuits, a microphone on the control machine in the tower can be used to broadcast warnings to men working about the yard tracks, or to advise the skate men when cars are coming down a certain track.

At the left on the control machine is a Webster Telespatch cabinet which includes a talk-back speaker and toggle switches to connect this unit to similar units located in the yardsmaster's office and in the shelter at the crest of the hump. The purpose of this telespatch system is to provide instantaneous communication between these men. For example, if the operator in the tower sees some condition in the yard that requires that humping be stopped, he can use the Telespatch to speak directly to the conductor at the hump, who has his radio to speak directly to the engineer on the locomotive that is pushing cars over the hump.

Page-printer teletype receiving machines are located in the control tower and in the shelter at the hump. The page-printer sending teletype machine is in the yard office. The latter unit is used to send the switch lists from the yard office to the hump so that the conductor will know where to cut the cars, and to the tower so the operator will know how to route the cars to the classification tracks. A telephone circuit parallels the teletype service.

The Westbound Yard

The locomotives used in yard switching service and for pushing cars over the hump are equipped with radio for communication with the conductor at the crest of the hump, and also the yardmaster at his office. The locomotives are equipped for operation on either of two frequencies, and, therefore, can tune in on either the eastbound or westbound hump, depending on where they are working. The yardmaster can use either frequency when making calls to engines. A total of nine engines are now equipped. This radio equipment is of the Type E furnished by General Railway Signal Company.

The westbound classification yard was changed only as was required for the installation of retarders. The ladders were removed and the tracks were grouped into four groups of five tracks each. The hump was moved about 350 ft. west and the grades were revised to meet the requirements for retarder operation. This westward yard has 20 tracks with five retarders totaling 423 track feet, and 23 power switches. The switches and retarders are controlled from a machine in a new brick tower north of the yard.

The general details of equipment and operation in this yard are similar to those in the eastward yard. One difference is that the retarders are supported on small concrete piers set on reinforced concrete slab footings.

This form of construction was not used in the eastward yard, where the retarders are supported by treated timber ties resting on a bed of crushed stone ballast extending to a depth of two feet below the bottoms of the ties. The concrete slab foundations are 20 in. thick and are reinforced with 3-4-in. rods spaced 12 in. The top of the slab is 22 in. below the base of rail. The piers are 12 in. wide and 42 in. long. Pads of Fabreeka 3-8 in. thick are placed between the retarder and the top of each supporting pier.

Also as a part of the overall project, the eastbound receiving yard and westbound departure yard were revised and new main-track connections and crossovers were added at the west end where a new electric interlocking plant was installed. Furthermore, two old frame eastbound yard offices were replaced by a new two-story, 22-ft. by 36-ft. brick office building.

Floodlighting Throughout

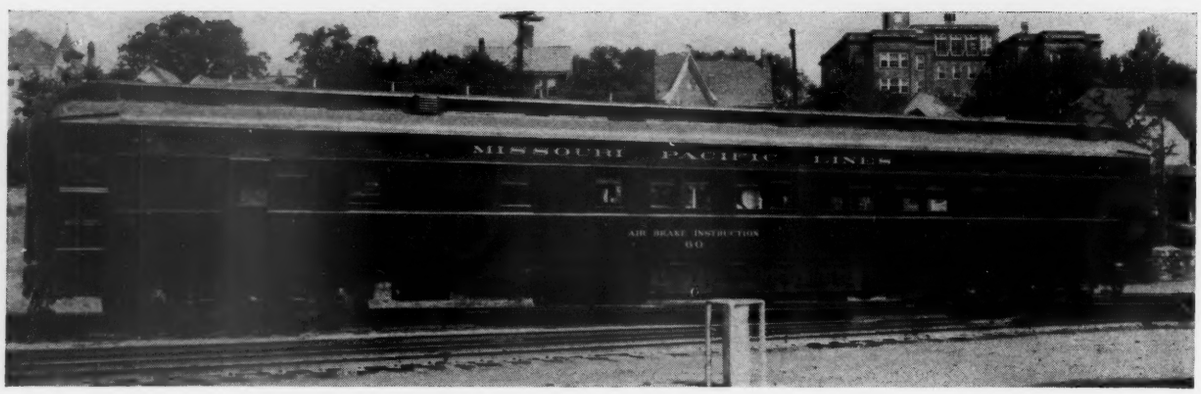
As a part of the project, the entire yard layout was floodlighted so that operations can be carried on during night hours. The floodlighting units, furnished by the Pyle-National Company, are rated at 1,000 watts each, and are mounted on twelve steel towers, each 100 ft. high. Of these towers, two have 14 lamps, one has 10, one nine, one eight, two six, three seven, and two four. The lamps are arranged and directed so that the calculated light intensity is two to three foot-candles in the areas including the crests and down the humps through the switches and retarders. This light intensity is better than good moonlight and sufficient for reading a newspaper. A lower intensity, about 0.3 to 0.4 foot-candles, is used throughout the length of the yard tracks.

The floodlights can be turned on and off by switches in the retarder control towers, or they can be controlled automatically by General Electric light-sensative photo-electric devices on the floodlight towers, which automatically turn the lights "on" as darkness falls, or "off" as dawn approaches. The lamps operate at 115 volts, and at each tower are fed from a three-wire, 115-230-volt circuit supplied through transformers at the base of the tower. These transformers, which were made by the General Electric Company, are rated at 4,160 volts on the primaries, which are fed from power distribution circuits for the yard as a whole.

The design and construction of this yard project were under the jurisdiction of A. C. Clarke, chief engineer, and E. F. Wright, regional engineer. M. S. Norris was assistant engineer and W. E. Dwy field engineer in charge of construction in the field. Communications, signals, power switch machines, and car retarder installations were under the jurisdiction of A. S. Hunt, chief engineer, communications and signals, Wilmer Welsh, signal engineer, and L. J. Prendergast, superintendent communication. The retarders, power switch machines, signals and control machine, as well as the radio equipment, were furnished by the General Railway Signal Company.

MISSOURI PACIFIC GETS NEW AIR-BRAKE INSTRUCTION CAR

Car will be used as a "classroom on wheels" to give all air-brake operating and maintenance forces on the railroad a better understanding of air-brake details



The M. P. air-brake instruction car is ice air-conditioned

In the interest of smooth train handling, both passenger and freight, the Missouri Pacific has recently equipped and placed in service a new air-brake instruction car, No. 60, designed for practical demonstrations of air-brake operation and the training of operating and maintenance employees. This new "classroom on wheels" will afford an opportunity for all motive-power employees having work associated with air-brake operation or maintenance to come to classes and learn more about air-brake details. Apprentice carmen, electricians, repair forces, mechanical supervisors, qualified enginemen and firemen will find in the extensive car equipment and the instructors' lectures, invaluable aid to their further education in the complexities of air-brake use and maintenance. For older men, the classes will serve as refresher courses, helping to clarify their extensive experience with air-brake operation or repairing, while all can learn about the newest and latest equipment, see it demonstrated and observe its functioning.

Car Rebuilt at Sedalia Shops

Originally an all-steel Pullman parlor car, the new air-brake instruction car was completely rebuilt and outfitted at the Sedalia, Mo., shops of the Missouri Pacific. It is replete with working, full-size brake equipment such as is used on locomotives and cars in passenger and freight service, including electro-pneumatic brakes installed on modern streamline passenger trains.

Ice air-conditioned and with comfortable chairs for 48 persons (although 60 can be accommodated), the car serves the major purpose of permitting study groups to assemble at designated points all over the system lines. It also affords means whereby running tests can be made while the car is en route from place to place.

Well-Equipped Crew Quarters

The car interior arrangement includes an instrument room, large instruction room, and two staterooms for the traveling instructors, or inspectors, if the car is being used to make running tests. The staterooms are interconnecting, have a shower bath, and each contains one permanent bed.

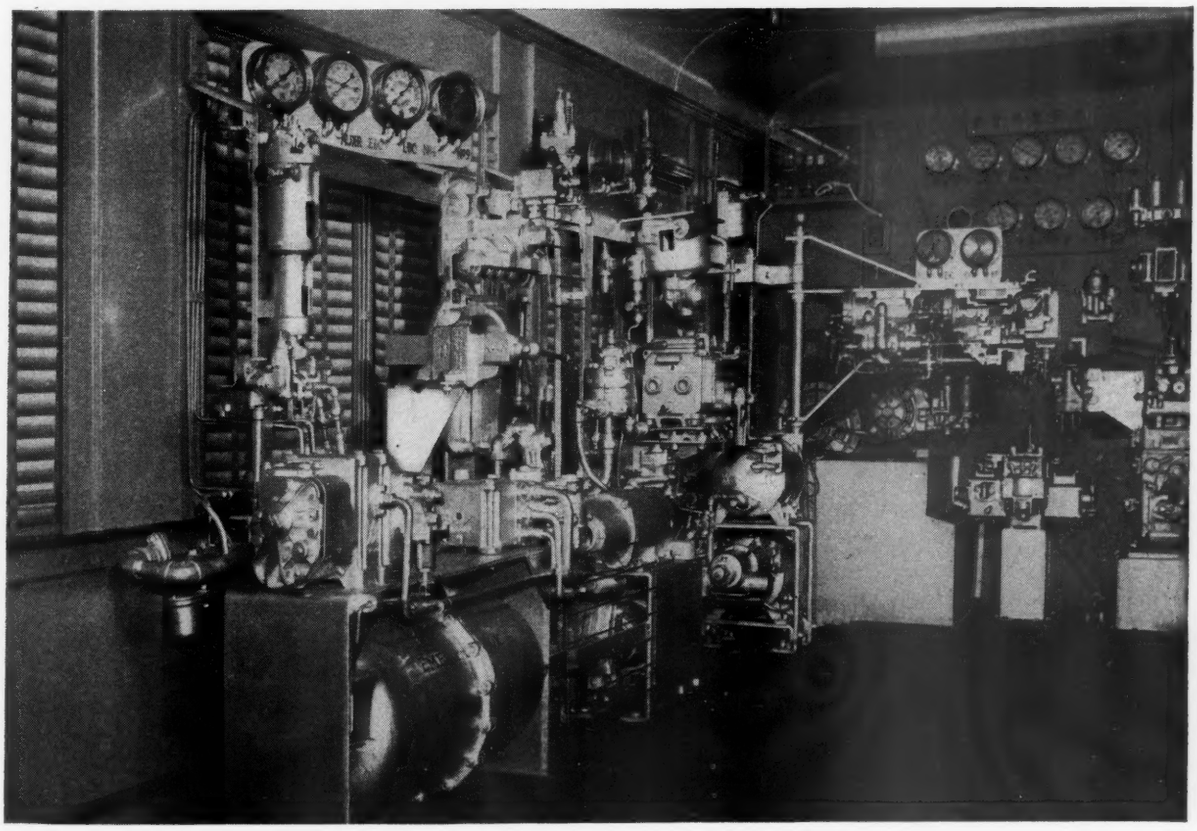
On a vertical steel panel at one end of the instruction room is mounted an operative set of D-24-RL brake equipment with electro-pneumatic devices. This equipment is the same as that used on new Diesel passenger locomotives. A speed-governor generator and a Reeves variable-speed drive unit are mounted as an auxiliary assembly, thus making it possible to simulate actual road operating conditions at speeds from 10 to more than 100 miles an hour. These variable speeds are shown on a General Electric speed indicator.

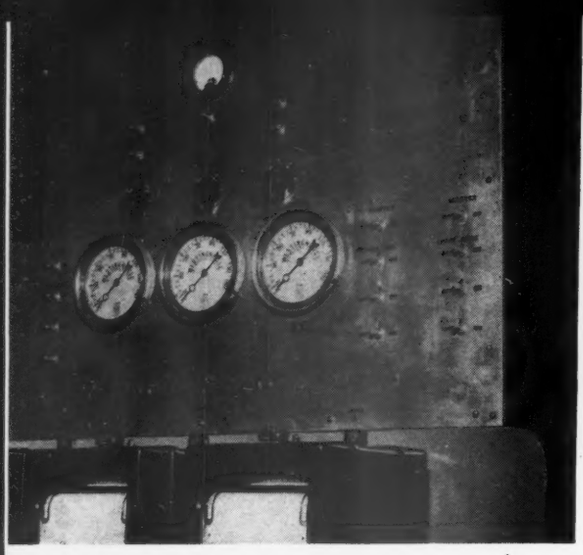
Along the side wall of the car are located sets of No. 8 empty-and-load freight-car equipment, No. 6-ET locomotive brake equipment, AB-1B high-speed freight-car brake equipment (this also can be used to demonstrate operation of standard AB freight-car brake equipment), UC passenger-car brakes and the K-2 type for freight cars.

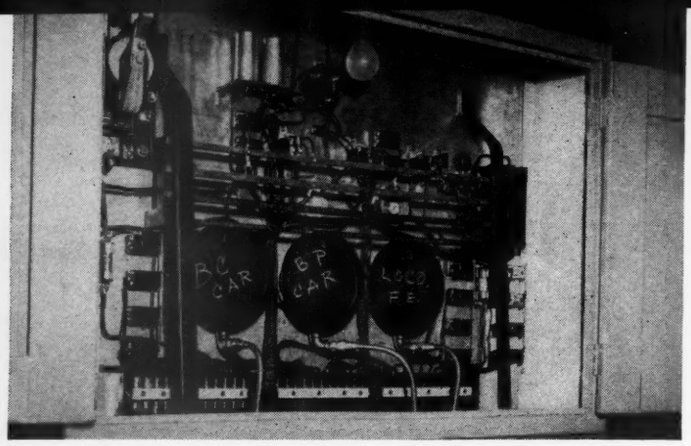
The demonstrating equipment has been so installed that all of it is along the side walls of the car, but the tell-tale gages that register operation of the mechanism have been mounted on brackets which can be swung out across the center aisle of the car so that all in the room may see. The No. 6-ET, the AB, UC and K-type

The class room, looking forward to the instructor's position

Left to right: No. 8 Empty-and-Load brake equipment; mechanical lubricator; No. 6-ET assembly; on the panel, right center, a D-24-RL assembly







Above—Back of the instrument panel with doors open to show installation details. Left—Instrument panel equipped with air-pressure gages, recorders and control switches

equipments also are thus applied, sections of rubber hose having been substituted for the rigid piping used in actual practice.

At other places along the side walls of the car are ranged various locomotive devices so cutaway that their interior construction may be viewed and their operation studied. These units include a No. 4 vent valve, ADA super-governor, SD-6 compressor governor, Edna Type-A mechanical lubricator, firedoor cylinder, and other small devices. This miscellaneous equipment is valuable for classes of locomotive enginemen and firemen.

Class sessions in the car are usually about 1½ hr. long. No predetermined course of study is followed. The instructors may have in the car on one day men who are repair and maintenance forces and whose interest is not primarily in operation of the equipment. On the next day, the class may consist chiefly of apprentices, or possibly qualified electricians interested mainly in electric brake service. Frequently, a large group presents a mixture of several interests. Thus, the instructors fit their lectures to the immediate and greater interest of the majority. On successive days (the car stays at one location from a few days to two weeks), the instructors seek to cover points not previously made, always trying to refine old techniques and endeavoring to inculcate good theory and practice.

Flexibility Provided in Instruction

Oral instruction is helped with a public-address system, the lecturer wearing a microphone to permit freedom of movement around the equipment. Visual aids available include projection equipment and manufacturer's charts and graphs, and other explanatory literature.

The instrument room in the car is equipped with varied devices for accurate recording of data incident to actual operation of the train in which the car is moving from place to place. A cast-steel pedestal supports a heavy table on which are mounted three Esterline Angus recording instruments. One pen records the speed of the moving car; the second records the pressure in the brake pipe under the car; the third records brake-cylinder pressure under the car, or brake-cylinder pressure on the locomotive when the car is placed next to the locomotive in a train.

On the left margin of each recording tape a timing pen marks in seconds the elapsed time. On the right margin of the tapes a pen records each 10 revolutions of the car wheels under the car. These instruments are used to record accurately the speed of the train in which the car may be running, the distance required to stop the train after application of the brakes, and the time consumed in making the stop.

By means of these instruments other data may be checked or new information compiled. The proper spacing of block signals can be checked against time required for trains to make stops in response to signal indications. The exact air pressures indicating brake applications being made by the engineman of the train can be watched, and other details of train handling observed and recorded.

Two Impact Recorders Installed

Other instruments include two impact recorders, one for use on passenger trains, the other for freight trains. These units automatically record train handling, recording jolts and jars on a time-calibrated tape. When checking on a freight train, one recorder remains in the car, which generally is placed next to the locomotive where impacts are lightest, while the other is placed in the caboose. These units will show up shocks in starting, or the amount of impact due to slack action between the various cars when brake applications are made and released. Proper interpretation of the instrument tapes will reveal at what time impacts were recorded and their extent and possible effect on merchandise carried in the cars. When studied and discussed subsequently, these tapes tell an accurate story of what actually happened and suggestions are developed to avoid rough handling as far as possible in the future. This phase of the lectures conducted in the air-brake instruction car is proving increasingly beneficial and probably accounts to some extent for reduced loss and damage claims.

The use of an air-brake instruction car is not new to Missouri Pacific enginemen, trainmen and repair forces; a similar car has been in service since 1926. The new car, however, embodies many improvements over its predecessors and is encouraging larger classes to attend everywhere it stops, so the investment in its construction and subsequent operation is expected to be more than justified. The car is operated under the supervision of W. R. Sugg, general supervisor of air brakes and lubrication, assisted by A. L. Toliver and Daniel McIntyre, air-brake instructors.

VOTERS TO RULE ON FEATHERBEDDING

Californians will have an opportunity at the general election November 2 to vote on "Proposition No. 3," the "Anti-Featherbedding Act," which would amend the state's 37-year-old "full crew" law. That law, enacted not long after the advent of the air brake, still requires the railroads to staff single freight trains with four, five, six, and, sometimes, seven brakemen.

This proposition, which would permit the California carriers for the first time to realize the full advantage of technological advances introduced during the past four decades, is sponsored by the four major railroads operating in the state, and has the support of George J. Hatfield, state senator and chairman of the California Committee Against Featherbedding. Proposition No. 3 is backed by the California State Chamber of Commerce; 75 local chambers throughout the state; principal farmer groups; shippers; women representing consumer groups; state safety associations; and a great preponderance of the state's 700-odd newspapers.

Chambers of Commerce and trade groups, agricultural interests, and industrial leaders, believing that the $3,000,000 which the "full crew" law adds to the operating costs of the railroads in payments to excess brakemen, has a direct, adverse effect on freight rates, are eager to have the amendment enacted.

Excess Crew Not a Safety Measure

Safety groups are impressed by the favorable record which the California roads achieved during wartime suspension of the "full crew" law from July 1, 1943, to February 28, 1946. "The record proves," proponents of the amendment state, "that accident frequency in freight trains declined nearly 10 per cent, and casualities among freight brakemen dropped 33 per cent, on the 'short-crew' trains," during the suspension.

The California Committee Against Featherbedding, in a series of pamphlets urging favorable voting action on Proposition No. 3, points out that enactment of the amendment will strike a blow against high living costs, removing from the statute books the "grandfather of all featherbedding practices"—the make-work provisions of the excess crew law. In stating that the amendment is not an anti-labor law, the committee "scotches" rumors that widespread unemployment will result from its passage. Of the 2,700-odd brakemen employed in freight train service on California railroads, approximately 486 are in the category of "law brakemen"—riding the trains only because of the "full crew" law—and, since there is a 20 per cent annual turnover of brakemen through retirement, transfers, or separation for other reasons, almost the entire 486 "excess" is thereby accounted for.

Law Ignores Improved Practices

California is one of 14 states which have so-called full crew laws of one kind or another. The provisions of its law are more drastic, however, than those of any of the other 13 states. The California statute has never been modified in recognition of the double-tracking of much of the state's main-line mileage, the installation of automatic block signaling or centralized traffic control, or other operating and mechanical improvements. In the era of its enactment, brakemen were in fact, *brake* men, for the installation of air brakes on freight equipment was still an innovation.

It is the conviction of the Anti-Featherbedding Committee that passage of the amendment would be in accord with sound public policy, and would reduce the cost of performing transportation business, which, in turn, would stimulate production and help create a more favorable economic balance. The amendment would place in the hands of the California Public Utilities Commission the responsibility for determining the safe and proper number of brakemen required on freight trains.

A RAILROAD OFFICER'S CREED

"A railroad officer holds his position as a trustee and not as a proprietor. He can properly retain it only so long as he is the best qualified man available for the post. Too often an officer is tempted to consider his position as a reward for past service and to regard it as a permanent possession like a golf trophy. Officers may recognize the fact that, if they want to make further advancement, they must work for it—but are they always fully aware that they should also work to hold the job they already have? The conception of proprietorship must be broken down and that of trusteeship substituted—not solely for ethical reasons but to strengthen the position of management in public esteem. The surest way of maintaining a strong position for management is for those who hold such posts to demonstrate at all times that they deserve them.

"If a job is done well or a department or an entire organization runs well, the credit should be given to the entire group. If the job is done badly or the organization or department functions inefficiently, the man at the top should bear the brunt of the responsibility because he alone is the one who is in a position to correct it. Too often, if the job runs well, the man at the top takes the credit for it, but if it functions unsatisfactorily, he finds it convenient to place the blame on the organization.

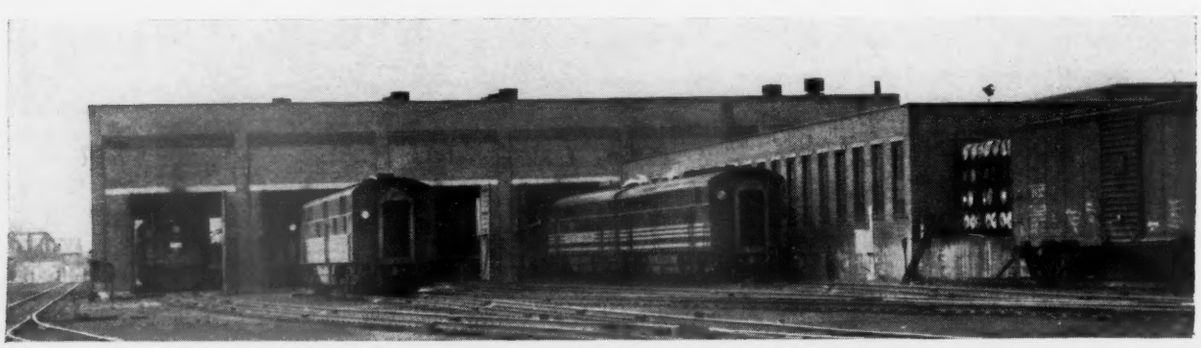
"The title of an official position should not be regarded by the incumbent as the measure of the prestige, honor and respect due him by the organization below him in rank. Instead, he should look upon it as a measure of the capacity and responsibility with which his superiors and associates have entrusted him. Titles tend to become confused with honors in the mind of many of the holders of them. This is wrong; titles should be wholly related to work, duties and responsibilities. Titles of officers of corporations should never be corrupted by subconsciously thinking of them as one does of titles of nobility—held without regard to performance."—J. W. B.

DIESEL SHOP SHOWS ADVANCES IN DESIGN

Boston & Maine facility for servicing and running maintenance of passenger locomotives, of through type with four tracks, reflects latest practices in construction, arrangement and auxiliary appointments

As the railroads continue to build shops and servicing facilities for handling Diesel locomotives, refinements and improvements in design, based on experience with earlier practices, are constantly being made. Evidence substantiating this observation is found in a new Diesel terminal that the Boston & Maine has built at Boston, Mass. While these facilities conform in most respects to the basic elements of design that have come to be generally associated with such structures, they incorporate many distinctive features calculated to place the servicing and maintenance of Diesels on a high plane of efficiency.

The new facilities are designed primarily for servicing and doing all running maintenance work on the road's fleet of 2,000-hp. Diesel passenger locomotives. The shop also handles running repairs and progressive maintenance for the Diesel switchers assigned to Boston, and, in addition, serves as a turn-around terminal handling the servicing and inspection on freight locomotives which are turned at Boston. Generally, the running maintenance of freight Diesels is performed at a shop built several years ago at Mechanicville, N. Y. Heavy repairs to all types of Diesels on this road are made at the company's main locomotive shop at North Billerica, Mass. Wheel and complete truck changes are normally made at Billerica, although in emergency



Above—The Diesel shop and storehouse as seen from the east end. Below—Looking across the shop interior from a point along the south wall. Facing page—A Diesel locomotive about to move out of the shop at the east end. The lift bridge is raised

3802
BOSTON AND MAINE
RAILROAD

The body and truck-washing platform has four rotary-brush type car washers

such work may be done in the existing back shop at Boston, which is adjacent to the new Diesel shop.

In planning the new shop the objective was to provide a capacity sufficient to handle all running maintenance work on a fleet of 20 passenger units, each averaging about 12,000 mi. per month, and, in addition, for making running inspections of approximately 15 freight locomotives per day. However, the designed capacity is such that the shop is capable of carrying economically an estimated 25 per cent overload when necessary. Diesels are handled at the shop on the progressive basis in accordance with the recommendations of the Electro-Motive Division of General Motors Corporation.

The shop building proper is rectangular in plan, 139 ft. wide and 176 ft. long, with the latter dimension extending in an east-west direction. Adjoining the north side of the building is a heating room 34 ft. by 52 ft. in plan. A storeroom, occupying a separate building, 50 ft. wide and 129 ft. long, adjoins the shop at its east end. An outside concrete platform, 62 ft. wide and 75 ft. long, with a ramp down to ground level, is provided at the east end of the storeroom.

The new shop has four tracks and is of the through type in that locomotives enter it at one end and pass out the other in an assembly-line movement. The direction of movement is from west to east. Immediately outside the shop at its west, or inbound, end the Diesels are fueled at one of two fueling platforms, each serving two tracks. One of these platforms has three fueling columns and the other has two. Outside the east, or leaving, end of the shop the locomotives are sanded, after which they may be routed over a single-track truck and body-washing platform. Both the washing platform and the fueling platform have distinctive features which will be described later.

Features of the Shop

The shop building is of concrete, brick and steel construction, with the concrete footings and pits supported on Raymond composite wood and concrete piles. The roof, consisting of Truscon Ferrobord steel decking covered by one in. of Johns-Manville Roofinsul insulation and a 4-ply J.-M. asbestos roofing, is carried by transverse trusses spanning between the side walls and two intermediate lines of columns, so that three longitudinal bays are provided. The southerly and middle bays are occupied by the four shop tracks, with working areas and platforms, while the northerly bay is set aside for the various auxiliary features, including a "clean" room, a "dirty" room, a tool room, an electric room, office space, and an oil-storage room. Toilet and locker-room facilities for shop employees are located overhead on a mezzanine floor.

Against a possible future need for additional shop capacity the building is so designed that it can be enlarged by adding to it on the southerly side. The side walls are notable for their large glass-block panels which contain pivoted steel sash for ventilation. The door openings for locomotives in both ends of the building are fitted with wood enginehouse-type doors with large glazed areas in their upper portions.

The track section of the building presents the conventional arrangement of track pits, depressed floor areas between tracks, and cab-floor-level working areas or platforms overhead. The pits are all 165 ft. in length, and each is designed to accommodate either a single or double-unit General Motors E-7 passenger Diesel. The southerly track is, in addition, laid out to accommodate two or three General Motors freight units of the FT, F-2 or F-3 types. At each end of the shop there is a tranverse walkway at track level, with steps leading down to the pits and depressed working areas, and up to the elevated platforms.

Freedom of movement at the upper floor level is assured by single-leaf lift bridges spanning the tracks between the platforms at the east end of the building where they are convenient for trucking material between the platforms and the storeroom and other auxiliary facilities in the northerly section of the shop. These lift bridges are motor-operated and have push-button control. Signal lights at the east end of each track give

a red indication in both directions when the bridges are obstructing the tracks and green when they are raised.

The walls of the engine pits are each topped with longitudinal 10-in. by 16-in. yellow pine timbers treated with chromated zinc chloride for decay and fire resistance, on which the pit rail is supported on double-shoulder tie plates. Joints in the pit rails were eliminated by butt-welding. Along the center line of each pit there is a grate-covered longitudinal gutter for drainage, and all of these gutters are pitched to a transverse drain at about the center of the building. The latter carries the effluent to a sump, from which it is discharged by a motor-driven pump. Gravity drainage was out of the question because of the low elevation of the shop site relative to adjacent tidewater.

For thawing ice and snow from the running gear of locomotive each pit has 10 Trane projection-type heaters located in the pit walls. Also, all pits are fitted with loops for testing automatic train-control equipment.

The elevated working platforms in the shop consist of cast-in-place concrete slabs supported on steel stringers and beams carried on steel columns. The wearing surfaces of the platforms were given a wood float finish, left rough, and were treated with sidewalk carborundum, of which 25 lb. was applied for each 100 sq. ft. of surface.

Appropriately spotted along each platform are outlets for compressed air, city water for batteries, electrical outlets and clean lubricating oil. Under the platforms for use at the depressed floor levels are connections for draining off dirty oil, and outlets for deionized water for cooling, compressed air, and city water for the flash type boilers; also outlets for making orifice tests on flash-type boilers and electrical convenience outlets.

Arranged over each pit is a series of steel ventilating hoods, each having a motor-driven blower with a capacity of 5,000 cu. ft. per min. The blowers are controlled by push buttons placed at the west ends of the platforms. The ventilator hoods are painted inside and out with Dampney Thur-Ma-Lox No. 7 high-temperature paint—black inside and aluminum outside. Based on the modern theory of color treatment for industrial buildings the shop interior is finished in a cascade blue for the sidewalls and ceilings and a sun-tone yellow for the end walls.

Hot-Air Heating System

The entire shop building, with the exception of the offices, is heated by a direct-fired, oil-burning hot-air system with induced draft and forced-air circulation, in which the ducts are of aluminum. The heated air is delivered through type "B" Anemostats. This system, which is thermostatically controlled, includes outlets for blanketing the engine-door openings to exclude cold air when the doors are opened.

The heating plant, located in the heating room previously mentioned, consists of two Lee heaters, each with a capacity of 4,000,000 B.t.u. per hour. To preclude possible objectionable odors, the offices have an individual heating system embodying a unit heater placed near the roof level.

The lighting system in the shop includes wall lights in the pits, recessed and protected with wire mesh, explosion-proof incandescent fixtures underneath the elevated platforms, and fluorescent fixtures for general illumination.

For fire-control the shop is equipped with two 20-lb. CO_2 dispensers on each platform, 50-lb. CO_2 dispensers at other locations, hose racks with fog nozzles on the end walls, and an overhead automatic sprinkler system. Pressure in the sprinkler system is maintained by a motor-operated booster pump in the heater room.

The auxiliary facilities in the northerly part of the shop building are completely equipped with all necessary appurtenances. In the "dirty" room these include two banks of tanks or other cleaning equipment, each surmounted by a monorail hoist and a steel hood for

One of the dome-type oil-unloading stations. The tilt-type walkway has been lowered to provide access from the elevated platform to the dome of the tank car

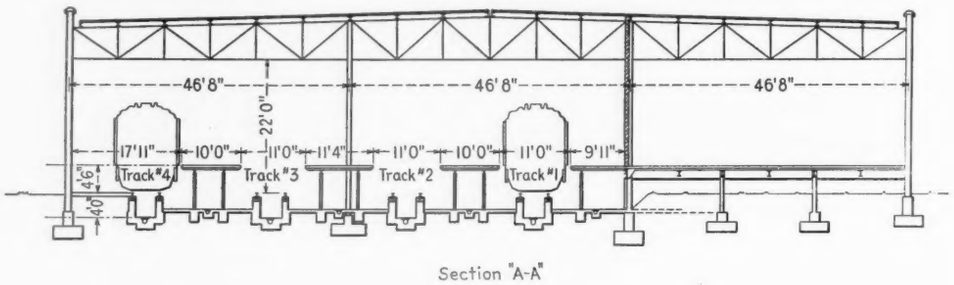
carrying off fumes. Effluent from these tanks passes through a 100-g.p.m. capacity Gale oil separator, located under the floor, before entering the drainage system. Equipment in the "clean" room includes two jib cranes, a 20-in. by 48-in. lathe, a Magnaflux testing unit, a drill, a hydraulic press, several grinders and head positioners, and necessary work benches. In one corner of this room, set off by wire grill partitions, is the tool room and the electric room. For handling heavy parts directly to and from locomotives in the shop, a 1,000-lb. Shepard-Niles monorail crane extends out over the two northerly tracks.

Equipment in the oil room includes a 15,000-gal. tank for used "lube" oil as drained from locomotives, a 15,-000-gal. tank for clean oil, a 2,000-gal. tank for de-ionized water, a Dearborn de-ionizing unit, and a 300-cu. ft. motor-driven Ingersoll-Rand compressor for supplying the needs of the shop for compressed air. To preclude corrosion the interior of the water storage tank is coated with Glyptal. This tank is equipped with a thermostatically controlled Whitlock heating element. Installed in the suction line from each of the 15,000-gal. tanks is a tubular heater capable of heating 50 gal. of oil per minute from 50 deg. F. to 95 deg. F. with steam at 5 lb. Motor-driven pumps in this room include one of 150-g.p.m. capacity to handle clean lube oil from cars to the storage tank, two of 50-g.p.m. capacity to pump clean oil from the storage tank to the shop outlets, one of 20-g.p.m. capacity to handle dirty oil from the shop to its storage tank, and one of 50-g.p.m. capacity to pump dirty oil from storage to tank cars in which it is sent to an outside concern for reclaiming.

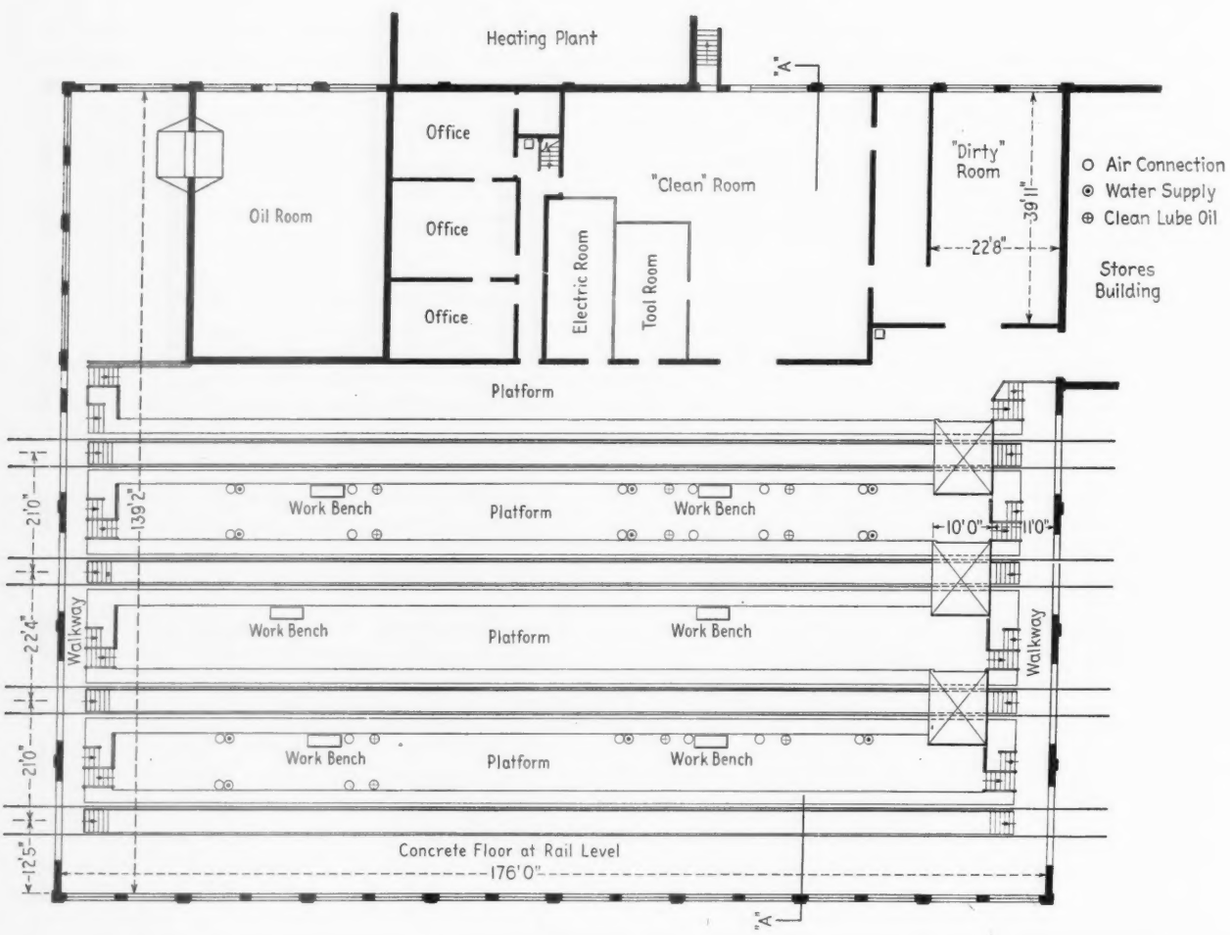
Truck and Body Washing

One of the most interesting features of the new Diesel facilities is the body and truck washing platform

Below—The general layout of the new shop. Right—The arrangement of working levels and pits conforms largely to conventional practice for such shops



Section "A-A"



east of the new shop. This platform is 22 ft. wide and 145 ft. long. Near the east end of the platform are four Whiting rotary-brush type car washers arranged in pairs 40 ft. apart, with the two washers in each pair placed on opposite sides of the track. The washers in one pair are designed to operate with either clear water or a cleaning solution, while the other two units utilize clear water only. Essential elements of the car-washer set-up are two small buildings, consisting of asbestos-protected corrugated metal siding and roofing on steel frames, one containing controls for the car washers and the other equipment for mixing the cleaning fluid. For cleaning the trucks of locomotives the washing platforms are equipped with two Sellers steam-jet units, which are situated near the westerly end of the platforms, one on each side.

The washing platform consists of a separate concrete apron, 5 ft. 9 in. wide, on each side of the track. Each apron is pitched toward the track to a longitudinal grate-cover concrete gutter near the ends of the ties, by which waste water from the cleaning operations is delivered through catch basins to a drainage system. Throughout the length of the washing platform the ties of the track serving this platform are embedded in an asphaltic material, which is sloped each way from the center line of the track to drain into the gutters. For night operation, the washing platform is well-lighted with a row of lights on standards along each side.

Oil Unloading and Storage

New facilities east of the Diesel shop also include an oil-unloading track and platform, a pumphouse and storage facilities. The unloading track, which accommodates five cars, has a concrete platform along one side incorporating five dome-type fuel-oil unloading stations, and an unloading station for bunker "C" oil for the heating plant.

Dome-type unloading stations were used here to avoid the possibility of oil spillage on the ground where it would be washed into and pollute the harbor water. Each of these stations has a vertical 3-in. riser pipe clamped to a 6-in. by 6-in. by ½-in. angle embedded in a concrete base. Attached to the top of the riser pipe by a Barco 7A-8 swing joint is a section of 3-in. aluminum pipe of sufficient length to reach to a position over the dome of a tank car spotted on the unloading track. When a car is to be unloaded a piece of 2½-in. aluminum pipe, of sufficient length to reach to the bottom of the tank car, and with a bell-type suction strainer at the lower end, is fastened to the end of the horizontal aluminum pipe.

During the unloading of tank cars a single-leaf tilt-type bridge, properly counterbalanced, is dropped down on the tank car adjacent to the dome, thus providing a safe walkway from an elevated platform to the dome. The 2½-in. aluminum pipes for insertion into the cars is stored, when not in use, in cradle supports provided for that purpose on the back side of the elevated platform. Access to the elevated platform from the concrete ground-level platform is by a steel ladder. To eliminate the necessity of using a pinch bar on an improperly spotted tank car the tilting walkway can be racked 18 in. parallel with the track in either direction.

Directly adjacent to the unloading platform is an earth dike enclosing two storage tanks, one of 100,000 gal. capacity for Diesel fuel oil and the other of 20,000 gal. capacity for bunker "C" oil. The larger tank is of the vertical type and rests on a gravel fill 2 ft. deep. The 20,000-gal. tank, of the horizontal type, is supported on concrete cradles.

The pumphouse, of brick and steel construction, with a Ferrobord steel roof deck covered with Johns-Manville Roofinsul and four-ply built-up roofing, is completely equipped with necessary pumps, meters and filters. These include three 300-g.p.m. Blackmer positive-displacement pumps, one for use principally for pumping oil from cars into storage, one for handling the oil from storage to the fueling platform, and a standby unit that may be used for either purpose. Also there are two 50-g.p.m. steam-jacketed Blackmer pumps for handling bunker "C" oil, one for pumping it from cars to storage and one for pumping it from storage to a 1,500-gal. underground use tank north of the heater room of the shop. The latter pump is controlled manually by a wall switch in the heater room.

Also in the pumphouse are three 10-element Michiana filters for filtering oil as it moves from storage to the fueling platforms, and a Bowser-Bassler temperature-compensated meter for measuring the oil on its way into storage.

The Fueling Platform

The locomotives are fueled at a station immediately west of the building, consisting of two platforms, each of which serves two tracks. One platform is 120 ft. long and has three fueling columns 50 ft. apart; the other is 80 ft. long with two fuel columns 60 ft. apart.

Each fuel column consists of a steel-angle-supported 2½-in. riser-pipe, to the top of which is attached, by a double-swing joint, a counterweighted 2½-in. pipe 5 ft. long. At the outer end of this pipe is attached a 2½-in. fuel hose which is provided with a squeeze-type valve. At the base of each fuel column is a Bowser Exacto temperature-compensated meter. At the east end of each fueling platform is a push-button station for controlling the delivery pump in the pumphouse. Water connections are provided at the east ends of both platforms, which are floodlighted.

The design of the fueling platforms reflects special consideration to the problem of preventing oil from being discharged into the harbor. They are of concrete and each of them is 12 ft. 4 in. wide, with the fuel columns located on the center line. Near each side of each platform is a longitudinal grate-covered gutter to which the surface of the platform is pitched from the center line and from the near edge. These gutters feed through 6-in. drain pipes that carry the effluent to a sump containing a Gale oil separator having a capacity of 100 g.p.m. A 4-in. drain from the oil storage room in the shop also discharges into the separator.

Immediately west of the shop is a loading and unloading track for lube oil. Of sufficient length to accommodate two cars, this track has two stations, one for loading used oil and one for unloading clean oil. Pumps for this purpose are located in the oil-storage room, as previously mentioned.

This project was executed under the general supervision of the office of the chief engineer of the Boston & Maine and under the direct supervision of the division engineer of the Terminal division.

DINER LOSS MOUNTS DESPITE IMPROVING OPERATING RATIO

1947 showing compared with 1940 in I.C.C. bureau's "Monthly Comment," which also reports on railroad securities, stock yields, fuel purchases, and age of freight cars

Dining and buffet service expenses of Class I railroads amounted to $1.31 per dollar of revenue from those services in 1947, a drop of 6 cents below 1940's $1.37, but the higher 1947 volume built that year's total loss on the business up to $25.6 million as compared with a 1940 red figure of $8.6 million. This is shown in an analysis presented by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment," which also contains articles on public and railway-industry holdings of railroad securities, yields on railroad common stocks, freight-rate increases on "important" commodities since 1946, purchases and prices of railroad fuel, and the age of freight cars.

Results of Diner Service

The diner-service analysis shows that the revenues of that business increased from $23.4 million in 1940 to $83.4 million in 1947, a rise of 256 per cent. Meanwhile, the rise in expenses, from $32 million to $109 million, was a smaller relative increase—197 per cent. Thus the 6-point improvement in the service's operating ratio, which was 130.64 in 1947 as compared with 136.7 in 1940. The improvement was the composite result of lower 1947 ratios in the Southern region and Western district and higher ones in the Eastern district and Pocahontas region. The latter had the highest ratio in both years—162.48 in 1947 and 150.23 in 1940; the Southern region had the lowest—117.03 and 125.45, respectively.

Similar data for 20 large roads (those having over $1 million of dining and buffet revenue in 1947) show that the Chesapeake & Ohio's 1947 ratio, 179.85, was the highest of the group. The lowest, 102.01, was that of the Southern, which was also low road in 1940 with a ratio of 116.67. The Great Northern's 193.21 was high in 1940, the C. & O. ratio for that year having been 161.08. All of the Western district roads on the list except the Missouri Pacific (up from 117.64 to 126.42) had lower ratios in 1947 than in 1940. Of the five Eastern district and Pocahontas region roads on the list, only the Baltimore & Ohio had a lower ratio in 1947 than in 1940—140.47 compared with 169.03.

Holdings of Rail Securities

The article on holdings of railroad securities shows that the par value of unmatured funded debt (including equipment obligations) in the hands of the public declined from $11,880 million in 1930 to $8,299 million in 1947, a reduction of $3,581 million or 30.1 per cent. This reduction "was primarily the result of financial reorganizations under the provisions of section 77 of the Bankruptcy Act and debt retirements by many carriers," the bureau says. It also notes that, while nearly $2 billion or about 54 per cent of the drop occurred during the war years, 1941-45, there were "further substantial reductions in both 1946 and 1947." The latter amounted to about $360 million.

Meanwhile, the total amount of capital stock outstanding in the hands of the public "has changed only insignificantly" since 1935, as the bureau puts it. While the tabulation by five-year intervals since that year shows variations, the 1947 and 1935 figures are identical—$7,002 million. This is 2.6 per cent less than the 1930 total of $7,186 million.

A similar tabulation of data on railroad securities held by railway companies shows that unmatured funded debt was thus held in the amount of $2,369 million at the end of 1930; and that such holdings increased to $2,693 million by the end of 1945, but dropped to $2,332 million by the end of 1947. The latter was 1.6 per cent below the 1930 total and 19.1 per cent under the 1935 figure. The industry's holdings of its own capital stock increased from a 1930 total of $2,897 million to $3,049 million in 1940, but dropped off again to a 1947 total of $2,540 million. The latter was 12.3 per cent and 16.7 per cent, respectively, below the 1930 and 1940 totals.

Yield on Stock and Rate Increases

For its report on railroad common stock yields, the "Comment" uses data obtained from the Standard-Poor's "Outlook." As the bureau summarizes their showing, those data indicate that "for the first time in several years, railroad common stock is selling at a price which yields about the same rate of return as that shown by public utility common stocks." The yield on 20 rail common issues for the week ended September 1 is put at 5.78 per cent as compared with a 5.73 per cent yield on 20 utility stocks and 5.47 per cent on 50 industrials.

"The average yield on these 90 stocks," the bureau continues, "was 5.51 per cent and the differences of the yields on these three classes of stocks fell within 0.27 per cent of the composite average. If the present situation be compared with that of 1946, the changes in the respective yields indicate that the prices of utilities and industrials have declined much more than the prices of rail stocks." The bureau suggests that the improved showing of rail stocks "is no doubt attributable in considerable measure to better earnings following successive increases in rail freight rates in 1947-48 and also to increased passenger fares, express charges and mail pay."

The freight-rate increases since June 30, 1946, have amounted to an overall advance of 44.2 per cent, according to an estimate given in the article which shows what the percentage increases on "important" commodities have been. Twenty-four carload commodity classes are on the list, and the range of increases is from 24.5 per cent on iron ore to 51.3 per cent on "other manufactures and miscellaneous and forwarder traffic." By commodity groups, the increases shown are as follows: Products of Agriculture, 38.4 per cent; Animals and Products, 47.1 per cent; Products of Mines, 31.7 per cent; Products of Forests, 47.6 per cent; Manufactures and Miscellaneous and Forwarder Traffic, 50.4 per cent; Less-Carload Traffic, 52.5 per cent.

Fuel Purchases and Prices

The article on railway fuel presents data showing that the July price of coal purchased f.o.b. mines was $4.46, an increase of 112 per cent above the July, 1941, price of $2.10. Fuel oil was up 160 per cent, from 91 cents a barrel to $2.37; Diesel fuel, 128 per cent, from 4.42 cents a gallon to 10.06 cents; and electric current, 30 per cent, from 8.15 mills to 1.056 cents per k.w. hour.

Figures comparing the first seven months of 1948 with the same 1941 period show that the railroads this year purchased 59,148,287 tons of coal f.o.b. mines, an increase of 4.6 per cent above purchases in the first seven months of 1941. The average price during this year's first seven months was $4.23, up 114.7 per cent from 1941's $1.97. The amount of Diesel fuel purchased during this year's first seven months, 656,697,403 gallons, was 919.5 per cent more than the 64,416,221 gallons purchased during the first seven months of 1941; and the average cost was up 132.1 per cent, from 4.33 cents per gallon to 10.05 cents. Purchases of fuel oil and electric current were up 23.4 and 22.2 per cent, respectively, and the average costs were up 167 per cent, from 88 cents to $2.35 per barrel, and 28.1 per cent, from 8.11 mills to 1.039 cents per k.w. hour.

Age of Freight Cars

The discussion of the age of freight cars is based on data published by the American Railway Car Institute, and the January 1 figures for 1948 and 1938 are compared. They show that the total number of cars owned by class I roads increased but slightly in the 10-year period—from 1,729,361 to 1,742,094. However, there was considerable variation in the percentage distribution by age groups.

As of January 1, 1948, 32.78 per cent of the cars were over 25 years old, as compared with 22.31 per cent in 1938. In the 21-to-25-year group, the percentage increased from 19.73 to 23.35. On the other hand, there were more 1948 cars in the lower age groups—11.47 per cent as compared with 8.09 per cent in the 1-to-5-year group, and 13.09 per cent as compared with 10.68 per cent in the 6-to-10-year group. The 11-to-15-year group included only 8.11 per cent of the 1948 cars, as compared with 21.49 per cent in 1938. In that connection the bureau observes that "cars in this age group in 1938, except for retirements, are in the 21-to-25-year group in 1948, and the 1938 cars which were 1 to 5 years old have moved into the 11-to-15-year group."

It also notes that on January 1, 1938, there were 726,917 cars which had been built 21 or more years previously and which if in service would have been 30 or more years old on the same date in 1948. Comparison of that total with the total number of cars 30 years old or more as of January 1, 1948 (365,247), shows, as the bureau puts it, that "361,670 cars that were 21 years old and more at the 1938 date have disappeared in the intervening 10-year period." It adds that "the large number of cars in the higher age groups as of January, 1948, is of course related to the difficulties the railroads have experienced almost since the close of the war in producing an adequate supply of freight cars."

Another article presents selected preliminary figures from some of the so-called waybill studies which are under preparation in the bureau. The figures, based on the one-per-cent sample of 1947 waybills which the railroads are filing, cover 22 commodities in the Products of Agriculture group, showing various averages for 1947. The range of average loads is from 12 tons for lettuce to 52 tons for wheat; the short-line haul per ton from 77 miles for sugar beets to 2,320 miles for lettuce; average revenue per 100 lb., from 5 cents on sugar beets to $1.69 on lettuce; average revenue per car, from $38 on sugar beets to $492 on oranges and grapefruit; average revenue per short-line ton-mile, from 6.7 mills on wheat flour to 2.69 cents on unmanufactured tobacco.

Communication . . .

Says We Like Dewey

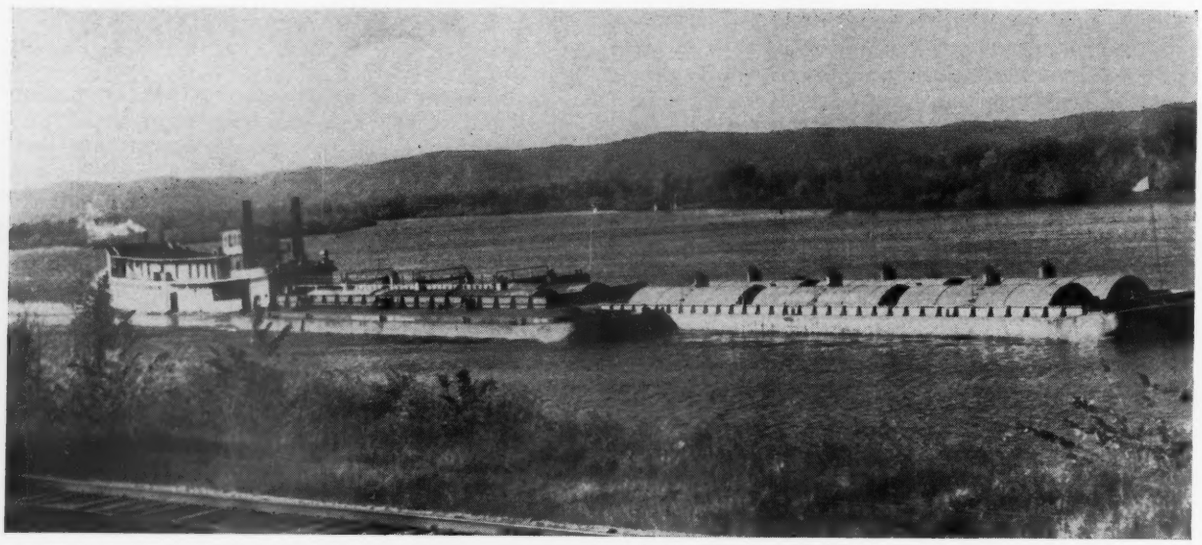
San Francisco, Cal.

To The Editor:

Dewey & Warren in the *West* can yell for more public power and transmission lines, more and more rural electrification, bigger and better transcontinental highways and best of all demand that more *rivers* be made navigable. For all this, to you they are *perfect gentlemen* and *executives;* you won't dare "ball" them out, when they take office you'll praise them to the sky. People are funny and you and your kind are among them. For the moment union leadership is on the way out. That's what the T. H. bill is doing, but just wait until the unions begin to fight politically. Their power will be terrific. You say it will not. I hope you live long enough to see. One thing the T. H. has done, it put the worker into POLITICS and that is what I have been praying for.

Anonymous

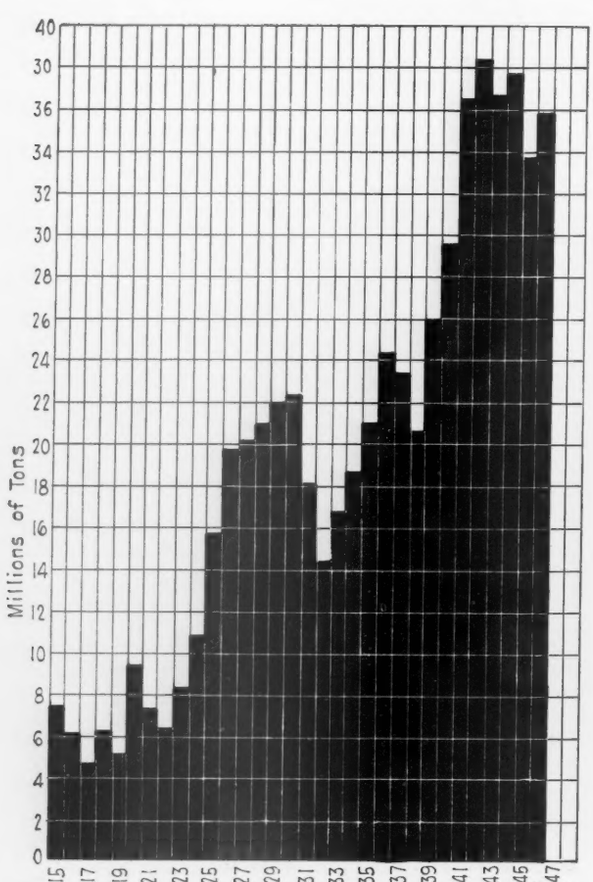
[We do not ordinarily print anonymous communications, but we make an exception of the foregoing—written on a post card—because it expresses a point of view which some railroad employees have adopted and which, however mistaken, must be reckoned with. It is just the attitude which one might expect to result from prolonged and uncritical reading of some sections of the union press. The writer will find out the degree of our admiration for the economic views of White House aspirants of both major parties by referring to page 36 in our October 2 issue.—Editor]



A tow and 5 barges viewed from a railroad private right-of-way 180 mi. south of Minneapolis

TRAFFIC DIVERSION CAUSE FOR ALARM

With traffic rates up and new factors in competition, an increasing number of shippers are found turning from the rails



A 32-yr. comparison of tonnage handled on the Ohio River. While figures are not available for 1947 or for the early months of 1948, estimates are that tonnage will approach or exceed the peak attained in 1942

Railway Age has asked a number of leading industrial traffic managers, railroad men, and leaders in other fields of transportation to what extent freight traffic—particularly that which has long been considered "inherently" rail traffic—is being lost to the railroads' competitors. While no definite picture or specific remedy stand out, it is perfectly plain that diversion of traffic has been spurred by the effects of the recent basing point decision; the Ex Parte 166 rate increase; high minimum carload weight requirements; or service disabilities—these factors operating either singly or in combination to an extent which makes the subject one of prime importance to the railroad industry. Here is some of the evidence:

Railroad freight traffic, viewed of and by itself, does not present a discouraging picture. Railroad movement of manufactured products, for instance, was up 13.6 per cent in 1947 over 1939. But—looking on the other side of the tracks—the volume of production of the manufacturers was up 75.5 per cent in the same period.

The competitive relationship is somewhat obscured by the lack of adequate statistics for other transportation agencies. A Department of Commerce report dealing with the situation admits "no really complete analysis of motor trucking is now possible because the information required for such a study has never been compiled." As for the waterways—the U. S. Army Engineers are still unable to give figures for

commercial tonnage handled on the inland rivers and canals for any period later than 1946. But the American Waterways Operators, Inc., are reported as estimating freight traffic over inland waterways this year as running 30 per cent over 1947's tonnage for an all-time high. Lockages at a point about midway on the Ohio river record the passage of 289 towboats and 1,300 barges engaged in commercial transportation during the month of August, 1948, the highest number in the past 10 years. The number of barges locked was 28 per cent greater than in August a year ago, and 69.7 per cent greater than in August of prewar 1939.

The Waterways Journal reported 54 new Diesel towboats installed in 1947, and states that 32 such vessels are now under construction, with 10 more on drawing boards. Some of these new boats, a far cry from their stern-wheel predecessors, will handle a complement of as many as 35 barges, with tonnage running up to 15,000.

Inroads in Perishable Traffic

Twenty-five per cent of the fruits and vegetables shipped out of Florida in 1947 were reported moved by highway—only 19 per cent were trucked out the year before. Carloads of fruits and vegetables unloaded at Philadelphia, Pa., and New York in May, June and July, 1948, according to figures published by the Department of Agriculture, compared with the same months of 1947 and 1939, show continued gains by the truckers. Truck receipts are shown in carload equivalents.

May, June and July	Rail Unloads	Per Cent	Truck Unloads	Per Cent
New York:				
1948	27,349	58.2	21,312	41.8
1947	32,504	63.3	18,855	36.7
1939	26,562	67.1	12,961	32.9
Philadelphia:				
1948	9,817	50.3	9,706	49.7
1947	11,457	55.9	9,049	44.1
1939	10,234	61.7	6,364	38.3

There does not seem to be any hope for this trend to change as long as railroad schedules remain longer, and rail rates higher, than those of the truckers.

The percentage of livestock received at public markets by other than rail carriers reached new highs in 1947. The gloomy comparison for 1947 with 1946 and 1939 is as follows:

	Per Cent Received by Other Than Rail		
	1947	1946	1939
Cattle	66.5	57.2	61.8
Calves	69.5	62.3	60.7
Hogs	69.9	60.7	68.3
Sheep and lambs	38.4	35.9	29.1

Rate increases which have been necessary to the railroads in meeting the increased cost of labor and materials did not have an unduly serious effect on diversions of traffic until the most recent Ex Parte 166 increases—on which it has been found necessary to add an additional 13 per cent. Where truckers in most cases already offered faster service—with lower weight minimums—Ex Parte 166 gave them a decided rate advantage, too. For the first time, whiskey started to move by truck all the way from Kentucky producing areas to the West Coast. Distillers find that deliveries are accomplished in seven or eight

Sixty-seven and one half per cent of all cattle receipts at Chicago in 1947 were by truck. Truck receipts for 1946 represented only 59.3 per cent of the total, and the 1945 figure was but 50.8

days, compared to from 12 to 15 days by rail; that breakage, frequently as high as 50 bottles in a carload, is sometimes eliminated completely. The whiskey movements on shorter hauls—to the Chicago area, for example—have gone 100 per cent truck for the multiple reasons that (1) consignees frequently have no rail receiving facilities; (2) the minimum weight is lower; (3) the rate is lower; (4) the damages are less, and (5) the service is faster. The loss of the whiskey movement is not unlike similar losses in a number of high-value commodities, and there are a great many features to be overcome, the principal one being the rate differential, before this traffic can be expected to move in box cars again.

Manufacturers of cigarettes—heretofore always heavy shippers by rail—are already beset by high taxation in the retail sale of their commodity, and have been quick to turn to trucks for transportation at reduced expense in order to keep the price of their product within reach of the consumers.

Truck movement of aluminum is on the increase. Newly established truckload rates on aluminum extrusions, with 20,000-lb. and 30,000-lb. minimums, from the Arizona producing area eastward are reported to affect shipments of 25½ million lb. annually. Aluminum which formerly made a round trip from a Southeastern producing area to a Middle West processing plant has been completely lost to the rails, since rates made the shipment for processing uneconomical and forced relocation of the processing plant at the producing point.

One shipper representative states that the heavy-loading requirements of O.D.T. Order 18A is a primary factor in rail freight diversion. Because the minimum weights imposed are so great on some commodities—very often on commodities in the higher rated brackets—"truck shipment," he reports, "is the easiest way out" even in instances where the truckload rate is higher per hundredweight than the carload rail rate. He expresses the fear that the continued "syphoning away" of high-rated freight will put an undue burden on the remaining traffic, thus bringing about additional rate increases on freight presently in the lower-rated brackets.

One important producer of canned goods is reported to have trebled his production in 1947 over 1946, without having increased his total rail shipping at all, the high carload minimums being almost the sole factor in his choice of motor freight. Approximately 90 per cent of his total production last year —with a sale value of nearly $30 million—moved by highway.

Steel by Highway

Paint and like commodities are reported particularly affected by the high weight minimums. Although multiple loadings offer a way out, the delay usually occasioned to the second or third consignees is considered so great as to nullify the advantages of rail shipment.

A survey of shipping in a medium-sized community in the Great Lakes area revealed that four times as much merchandise is moving out by trucks as by rail, the principal reason given being that superior service is rendered by the motor transport companies.

The movement of manufactured steel both by trucks and waterways has started in a big way. Truck manufacturers are reported swamped with orders for flatbed trucks for handling such commodities, indicating that the diversion may be in its infancy. One steel spokesman states that truck shipment of steel is retarded only by the fact that the steel plants are set up for rail shipping. If mill pricing of steel is to become universal, and consignees demand truck shipment, this condition is likely to be modified. One receiver of manufactured steel stated that he would request more truck shipments if his plant were not set up favoring receipt by rail. This same consignee stated his preference for truck shipment of some types of iron and steel products, despite his inferior truck-unloading facilities, because he could get a 20,000-lb. minimum, and because the service was faster. Since warehouse space is at a premium, truck movement enables him to control a small inventory more satisfactorily. This firm receives some steel by barge—even though it has no dockside facilities. The steel is switched to the plant by rail, so that the low water rate ($4.91 per net ton, plus $13.65 per car switching charge, compared with $11.20 per net ton all-rail) is enjoyed and the freight is still received in the most desirable way—loaded in railroad freight cars.

A potato-growing area which had long shipped its entire crop by rail turned to trucks for the first time when the recent rail strike threat endangered the sale of crops at the peak of the shipping season. The truckers came to the rescue—moved the crop faster and more cheaply than the railroad had previously—and now apparently have the business for a long time to come.

Real Danger Lies Ahead

Unless truck rates move upward to match rail rates, or the rail rates move down, the trend is bound to continue, many shippers assert. In the case of the former, there is the danger that private trucking will become more economical for industry than the use of commercial transportation agencies, which, theoretically at least, should be geared to do their mass transportation job at a much lower unit cost than the operator having to provide complete facilities—and equipment sufficient to meet peaks—for his own single transportation job.

There seems to be little that can be done in matching tariffs of the more heavily-subsidized water lines, and the principal defense left open to the railroads would seem to lie in an effort to arouse opposition to further extension of these toll-free facilities. A real threat lies in the increasing inventory of trucks and barges, for which solicitors will be eager to secure freight if and when the total volume of business declines and this equipment becomes idle. That the equipment inventories of these transportation agencies is daily growing is evident from production records made last year and so far this year by the leading motor truck builders, and by the number of tows and barges on order for the inland waterways. For the first time in history, the barge lines have made applications to the bankers for equipment trust certificates to finance their new equipment acquisitions.

GENERAL NEWS

Eastern Roads Denied Boost in L.C.L. Rates

Commission sees disruption of long-standing rate relations

The Interstate Commerce Commission this week denied a petition filed in May, 1947, by railroads operating in Official Classification territory for leave to publish short-form tariffs and for other relief necessary to make effective their plan for increasing rates on l.c.l. and any-quantity traffic. The proposed increases, which the carriers sought to make effective not later than July 20, 1947, were an undertaking by the railroads to place l.c.l. and any-quantity rates on compensatory levels, and were estimated to produce additional annual revenues of $26 million, of which about $10 million would have accrued to the Pennsylvania.

Railroad Proposal

As reported in *Railway Age* of June 7, 1947, page 1184, the eastern roads' proposal contemplated that fourth class would be made the minimum rating on all l.c.l. or any-quantity business, including exception ratings on such traffic. This would have made the minimum rate 50 per cent of first class, whereas l.c.l. and any-quantity rates now range downward as low as 13 per cent of first class.

Along with this minimum, the carriers proposed increases generally ranging from 110 per cent in the first-class rate for distances of five miles or less to 10 per cent for distances of 600 miles or more. The proposed new basic scale of first-class rates—which also reflected increases ranging from 1.5 per cent to 95 per cent over the present first-class rates applicable on traffic subject to classification ratings—varied from 86 cents per 100 lb. for five miles or less to $1.09 for 100 miles, $1.25 for 200 miles, $1.72 for 500 miles, $2.51 for 1,000 miles and $3.41 for 1,600 miles. The proposed rate on fourth-class traffic (the minimum rating) for distances of five miles or less was 43 cents per 100 lb.

The railroads' proposal, the commission found, is "novel, and represents a complete departure from the manner in which class rates applicable on carload and less-than-carload traffic have been constructed in the past." The finding by the commission's majority that the proposed rates have not been shown to be reasonable and just, or non-prejudicial and non-preferential, brought a dissent by Commissioner Miller, who was joined in his expression by Commissioners Barnard and Mitchell. Commissioner Patterson did not participate in disposition of the proceeding, docketed as No. 29770.

Deficits on L.C.L. Traffic

The increases were sought by the railroads to offset losses in handling l.c.l. and any-quantity traffic. The petitioners cited that the 1946 operating ratio on l.c.l. operations for nine official territory roads was 152 per cent, and that l.c.l. traffic handled that year by the same nine carriers resulted in a deficit of $89,860,885. The carriers also advised the commission that, for the first quarter of 1947, an operating deficit from l.c.l. traffic of $9,190,496 was incurred by the Pennsylvania and $3,009,770 by the New York Central.

The commission, however, concluded that the railroad's proposal would disrupt the long-standing relations between rates on l. c. l. and carload traffic. "In widening the spread between those rates," it said, "it would adversely affect shippers of l.c.l. traffic, resulting in undue prejudice to such shippers and in undue preference to shippers of carload lots, between points in official territory. For example, the ability of shippers of iron and steel articles in l.c.l. quantities to compete with shippers of such carload quantities from and to the same points within official territory would be seriously impaired."

The commission also found that the carriers' proposal would not conform to its previous findings that uniformity of the class rate level is "proper" throughout the entire country east of the Rocky Mountains. In this connection, it said that the proposed rates, for distances up to 200 miles, are substantially higher than those within the south, and also exceed those in the southwest for distances of 100 miles. "The proposal," it added, "would also disrupt the relations existing between intraterritorial and interterritorial rates, many of which were approved or prescribed by us."

The commission also noted that, subsequent to the filing of the instant petition, all l. c. l. class rate traffic lower than fourth class (50 per cent of first class) in the classification or exceptions thereto was increased to that level. "We have also given interim increases in Ex Parte No. 166 equivalent to 30 per cent in all class rates," it went on. "These increases will offset to a substantial extent the deficits incurred in l.c.l. operation."

The commission recalled that it previously had found that l.c.l. traffic as a whole was carried at a deficit in all territories, except possibly in the south, and that such traffic was not bearing its proper share of the costs of transportation. In making such a finding in May, 1945, in the Docket No. 28300 proceeding, the commission said, it admonished the railroads "to give careful consideration to the rates maintained by them on l.c.l. traffic with a view to making readjustments in ratings and rates, as promptly as possible, which will insure that the rates on such traffic are on a compensatory level."

"In that admonition, however," the present report states, "there was no intimation that the class rates on l.c.l. traffic were to be given a blanket increase as here proposed. There is no indication that the rates on the higher rated commodities, such as those rated second class and higher, are not fully compensatory, and that these commodities are not bearing a proper share of the transportation cost. An increase, as here proposed, would result in unreasonable rates on such traffic. In removing the deficit resulting from l.c.l. operation, carriers should survey their l.c.l. rates and make increases where such rates are low and where the traffic can reasonably bear such an upward adjustment. But we are not convinced on this record that there should be a blanket increase such as is here proposed in the class rates on all l.c.l. traffic."

Among other things, the commission found that the railroads' proposed l.c.l. rates would, in most instances, exceed the less-truckload rates, "thus reversing the present general relation between the rates for those respective forms of transportation."

Shippers' Position

Protesting shippers, the report noted, were of the opinion that the proposed increases would disrupt relations between carload and l.c.l. rates within Official Territory and between l.c.l. rates on intraterritorial and interterritorial traffic because of the adverse effects of the proposed increments upon the distribution by them of competitive traffic. They contended the proceeding should be consolidated with two pending investigations—No. 29555, Pick-up and Delivery by Railroads, and No. 29556, Charges on Small Shipments by Railroads—and that those related proceedings be held in abeyance until the commission finally determined in Ex Parte No. 166 what emergency rate increases should be authorized for nationwide ap-

plication on carload and on l.c.l. traffic.

It was contemplated by the protestants that the increased spreads between intraterritorial carload and l.c.l. rates, which would result from the proposed increases, would (1) operate to the disadvantage of numerous small shippers whose products are distributed in l.c.l. quantities, and to the advantage of large shippers who ship in carloads; (2) cause the diversion of large quantities of traffic from rails to highways; (3) prevent equalization of prices at competitive points; (4) preclude sales in district markets; and (5) cause relocation of producing plants and warehouses at points near consuming areas, thus permitting distribution for short distances by motor carrier.

The Public Utilities Commission of Ohio also took the position that approval of the proposed rates would cause the railroads to lose additional traffic to the motor carriers. It held that the refusal of the railroads to establish joint rates with the motor carriers is a "lack of foresight" on the part of the former, and suggested an increase of one class in the classification ratings on l.c.l. and less-truckload traffic "as a means of solving the problem now confronting rail and motor carriers in handling small shipments." Under its proposal, the minimum increase per 100 lb. over the present rates on l.c.l. traffic would be 13 cents, and at 300 miles the maximum increase would approximate 22 cents, or an overall increase of about 15 per cent. In this connection, however, the commission stated that "the proposed plan does not necessarily contemplate . . . an increase in motor carrier rates at the same time as in the rail rates."

Miller Dissents

Commissioner Miller, meanwhile, held that he would have approved the railroads' proposal. "The report abundantly shows that less-carload traffic, as a whole, is being transported by petitioners at a loss and that it is not bearing a proper share of the transportation burden," he said. "This confirms the view often expressed by the commission in various prior proceedings. Notwithstanding this, the petitioners are here denied permission, for reasons which I deem insufficient, to increase rates on this traffic to the somewhat remunerative basis which would result from their proposal. Moreover, the report offers no alternative concrete solution to the revenue problem confronting the carriers in connection with the transportation of this traffic. It simply leaves the situation where it is, being content with vague general statements as to the matter."

SEPTEMBER REVENUES 15.6 PER CENT ABOVE THOSE OF SEPTEMBER, 1947

From preliminary reports of 82 Class I railroads, representing 81.1 per cent of total operating revenues, the Association of American Railroads has estimated that September gross amounted to $680,950,422, an increase of 15.6 per cent above the $589,196,606 reported for the same 1947 month. Estimated September freight revenues amounted to $561,439,631, as compared with $478,303,319, an increase of 17.4 per cent, while estimated passenger revenues totaled $68,584,309, as compared with $66,858,671, an increase of 2.6 per cent. The estimate for all other revenues was $50,926,482, as compared with $44,034,616, an increase of 15.7 per cent.

Short Lines Hold 35th Annual Meeting

Representatives of 149 carriers hear many talks at Chicago

Approximately 250 members and guests, representing 149 carriers, convened at the Hotel Morrison, Chicago, on October 13 and 14 to attend the 35th annual meeting of the American Short Line Railroad Association. Maj.-Gen. Carl R. Gray, Jr., Veterans Administrator, addressed the members at a luncheon meeting on October 14. President J. M. Hood presided over the two-day meeting, and reported on the activities of the association for the year just past.

General Gray chose for the topic of his address the ramifications of the Veterans Administration, because, he said, it was a subject of personal interest to nearly every American. He described the work of the medical department, which has under construction 40 of 90 proposed new hospitals.

Daniel P. Loomis, chairman, Association of Western Railways, traced to date the progress of the current wage negotiations. He told the members that the non-ops, in negotiations at Chicago from September 8 to 17, had refused to work toward any settlement by separating their 25 per cent wage increase demand from the 40-hr.-week-with-48-hr.-pay demand—including time and one-half for Saturday work and double-time for Sunday work, with an 8-hr. minimum for any work performed on those days—and had begun circulation of strike ballots, already printed and dated September 18, having declined to invoke the services of the National Mediation Board. The carriers invoked the services of the board, he said, but its efforts failed completely, the non-ops declining to place their demands before an arbitration board.

Frank C. Squire, carrier member of the Railroad Retirement Board, reviewed the status of that board's work, and stated that the board is attempting to persuade dependents of deceased railroaders to seek annuities at age 65 instead of the optional lump sum provided for under the Crosser amendments, where the former course is advisable.

Claim Handling Criticized

S. E. Kantowicz, assistant traffic manager, Spiegel, Inc., and chairman of the claim committee of the Chain Store Traffic League, who estimated that as much as 60 per cent of all l.c.l. traffic is governed by routing instructions of that league's members, complained that the short lines' handling of claims is "pitiful." One member countered that his road had checked its chain store traffic for a five-yr. period, and found that claims equalled total revenue received from this traffic, and that many claims were found to be on goods damaged before shipment. Mr. Kantowicz stated that the league did not want its members to present fictitious claims and wanted to be appraised of any such instances. What is expected, he said, is prompt acknowledgement of all presentations, and prompt settlement of legitimate claims. He suggested that the association consider establishing a central claim agency, or that the tap lines arrange with their connections to handle their claims and be reimbursed therefor.

C. P. Dugan, carrier member, Third Division, National Railroad Adjustment Board, urged the members to develop and present all the facts before presenting cases in order that just awards might be made. He suggested that the roads request oral hearings to the greatest extent possible.

G. E. Miller, deputy second assistant postmaster general, Washington, D. C., reviewed the development of the Post Office Department and the Railway Mail Service. He explained the necessity of taking mail off mixed freight and passenger trains to quell the many complaints of late and irregular mail thus handled.

L. S. Price, bureau of accounts and cost finding, Interstate Commerce Commission, stated that he had set out to prepare a talk on the importance of the work of accounting officers, but that in the meantime an article by J. W. Barriger, president of the Chicago, Indianapolis & Louisville, had appeared in *Railway Age* (August 28, 1948) which covered just about anything he might have said.

John M. Hall, director of locomotive inspection, I. C. C., reviewed commission rules applicable to Diesel-electric operation, and told the members the best prevention against Diesel failures and accidents could be achieved through cleanliness, and maintenance of equipment by qualified mechanical forces.

Arthur H. Gass, chairman, Car Service Division, Association of American Railroads, briefed those in attendance on the car supply situation, and urged the short line roads to expedite turnaround of all equipment, and particularly gondola cars.

Reports of all committees were accepted, except that of the operating committee, which proposed among other

things, an increase in the maximum annual bill for fee and dues.

To the association's vigorous legislative program was added a recommendation that the annual salaries of the Interstate Commerce Commissioners be increased from $12,000 to $18,000. Mr. Hood reviewed the association's recommendation—first made eight years ago—that the Railway Labor Act be amended to provide for a "tri-partite National Railroad Adjustment Board, with equal representation by railroads, railway labor organizations, and the public, with the public members appointed by the President and confirmed by the Senate, and removable only for inefficiency, neglect of duty, or malfeasance in office."

Election of Officers

J. M. Hood, president, C. A. Miller, vice-president and general counsel, W. J. Kane, assistant general counsel, and C. E. Huntley, secretary-treasurer, were re-elected.

D. W. Thomas, president of the Chesapeake Western, was elected vice-president of the Eastern region, filling the vacancy created by the death of O. H. Nance. O. A. Kirkman, executive vice-president, High Point, Thomasville & Denton, was elected vice-president of the Southern region, in the place of H. W. Purvis, retired. Other regional vice presidents were re-elected.

What "Corresponding Interstate Rate" Means

The Interstate Commerce Commission has interpreted that proviso of its intrastate rate decisions which has stipulated that increases found justified shall not include any that would make the intrastate rates exceed the "corresponding level of interstate rates for hauls of like distance." The interpretation explained that the quoted phrase refers to the "general level" of interstate rates to and from points in the state involved—not merely to interstate rates to or from the same points of origin or destination as the compared intrastate rates.

The explanation came in a supplemental report in No. 29729 which involves Arizona intrastate rates. In the original report the commission had found that unjust discrimination against interstate commerce resulted from the refusal of the Arizona Corporation Commission to authorize intrastate increases on ores and concentrates (among other commodities) in line with the interstate advances approved by the commission in the Ex Parte 162 and Ex Parte 166 proceedings. The finding included the usual proviso requiring that "none of the intrastate rates shall be increased to such an extent that they will exceed corresponding interstate rates for hauls of like distances to or from points in Arizona."

The commission entered no order, since the Arizona Commission had advised that it would permit the railroads to comply with the finding. When the increased intrastate rates on ores and concentrates were published, however, the Arizona commission suspended some of them on the ground that they exceeded "the corresponding interstate rates for hauls of like distances to or from points in Arizona."

The railroads thereupon filed a petition asking the commission to issue a supplemental report clarifying the proviso. They took the position that limitation of the proviso's application to interstate rates to or from the same point of origin or destination in Arizona as the compared intrastate rates was "implied or intended" in the commission's finding. Shippers interested in the rates on ores and concentrates took the other view in their reply to the railroad petition. Meanwhile, the commission noted that a "proviso identically worded" had been included in many of its intrastate rate decisions in recent years; but "no question as to the interpretation of the word 'corresponding' such as that here raised has ever come to our attention."

In rejecting the railroad contention, the commission said that a finding along that line would be "unduly restrictive." It added: "We found in our prior report that conditions incident to the intrastate transportation of ores and concentrates between points in Arizona are substantially the same as those incident to the transportation of like traffic between points in Arizona and points in adjoining states, and it would clearly be improper to make another finding which might require an intrastate rate to be higher than the general interstate basis, considering distance, value, and the number of participating carriers. We are unable to sanction the interpretation. . . . which respondents seek and see no reason for modifying the finding."

Finds Truckers and Forwarders Make Unlawful C. & D. Payments

The Interstate Commerce Commission has found that motor carriers and freight forwarders are making unlawful payments for pick-up and delivery services performed by warehousemen, pool car distributors, or other cartage operators at Kansas City, Mo.-Kan., Minneapolis, Minn., and St. Paul, Seattle, Wash., and Portland, Ore. The payments which the commission condemns are higher than published allowances paid to shippers for performing their own pick-up and delivery services, another finding of the report being that such higher payments become lawful only when they are made pursuant to written contracts under which the draymen are agents of the carriers.

Railroad pick-up and delivery arrangements at the cities involved were found to be on the written-contract basis, and thus lawful. Written contracts were not involved in most of the motor carrier and forwarder arrangements; and the commission found that, under such circumstances, the payments must not exceed the published shipper allowances.

The report, by Commissioner Mitchell, embraces four investigations (the title case being No. 29762) instituted by the commission last year (see *Railway Age* of June 14, 1947, page 1231). Commissioner Barnard filed a dissenting opinion to which Commissioners Lee and Mahaffie subscribed, while Commissioner Patterson, "being necessarily absent," did not participate. The dissenters would have found that the warehouse companies and pool car distributors are "consignors or consignees within the meaning of the present tariffs," and that "payment to them by respondents of unpublished allowances for pick-up and delivery service is in violation of the Interstate Commerce Act."

I.C.C. Concedes It Can't Broaden Truck Permits; "Interprets" Them

Reporting on reconsideration in the Ex Parte No. MC-38 proceeding, which involves operating rights held by contract truckers serving meat-packing houses, Division 5 of the Interstate Commerce Commission has conceded that the commission lacks authority to expand those rights without showing, under the permit sections of the Motor Carrier Act, that the expansion would be consistent with the public interest and the national transportation policy. At the same time the division has accomplished the result contemplated in its prior report by "interpreting" the permits as authorizing transportation of the same list of commodities that the proposed modifications would have authorized.

As noted in the *Railway Age* of January 12, 1946, page 163, the prior re-

WILL RE-OPEN RAILROAD FAIR IN JUNE, 1949 — MAJOR LOHR

A "bigger and better" Railroad Fair will open at Chicago in the latter part of June, 1949, Major Lenox R. Lohr, president of the fair, announced this week. The 1949 exposition, said Major Lohr, was requested by many civic and school groups because of the fair's educational value and its portrayal of "Americanism." As was noted in the *Railway Age* of October 2, page 66, the fair's board of directors empowered Major Lohr to make the final decision concerning a re-opening of the show next year.

The 5,000-seat grandstand for the presentation of the pageant will be enlarged and many new exhibits will be added, he said. The area of the fair will not be extended, but better utilization will be made of the existing grounds, Major Lohr explained.

The 1948 Railroad Fair, which closed on October 3, attracted over 2,500,000 visitors in 76 days.

GREAT WESTERN ELECTS STAUFFER, K.C.S. DIRECTOR, ITS NEW CHIEF

The board of directors of the Chicago Great Western, on October 19, elected Grant Stauffer, a director of the Kansas City Southern and a coal executive of Kansas City, Mo., president of the road, succeeding Harold W. Burtness, who resigned effective September 1, as reported in the *Railway Age* of August 14, page 69. Mr. Stauffer, who is associated with the Sinclair Coal Company at Kansas City, assumed his duties immediately. He was also elected a director and a member of the executive committee.

Also on October 19, the road made a final $2,000,000 payment on the $6,000,000 loan which it received from the Reconstruction Finance Corporation in 1941. The directors at the same time approved expenditures for various improvements, which was said to be a step toward an "all out" effort to build up the property.

port held that the commission was without authority to modify the permits on its own initiative; but it offered to broaden them upon written requests from the individual truckers. The proceeding out of which the reports have come was instituted upon petition of the American Meat Institute. In supporting that petition, the interested contract truckers stated that the lack of uniformity in commodity descriptions used in their permits had created a situation which required commission action to remove all doubt of their rights to render the services which they had been rendering. The commission agreed, and offered to modify the permit of any packing-house-products carrier to specify about 75 commodities which it would be authorized to transport.

Petitions for reconsideration were then filed by railroads in Official and Western territories, and by the Regular Route Common Carrier Conference of American Trucking Associations; and the division reopened the proceeding. In agreeing with those petitioners' contention that the commission is without authority to make good on its offer to enlarge the contract-carrier rights, the division, in the present report, decides that "enlargement of the permits is not here involved"; that it had before it only the matter of "interpreting indefinite language used in describing the commodity scope" of the permits.

"Certainly," the report said, "we are empowered to interpret our own certificates and permits." That assertion is supported by citations of court decisions upholding the commission's right to construe "indefinite or ambiguous" terms of its own reports or orders. Thus the commission finds that "meat and packing-house products, packing-house products, and merchandise dealt in by meat-packing companies" consist of the commodities which would have been involved in the permit-modification plan. Meanwhile the presents report affirms that finding of the report which rejected a proposal that blanket authority also be given the contract truckers to transport equipment, materials and supplies used in the conduct of the packing-house business.

August Accident Statistics

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for August and for this year's first eight months. The compilation, which is subject to revision, follows:

Item	Month of August 1948	Month of August 1947	8 months ended with August 1948	8 months ended with August 1947
Number of train accidents*	1,052	1,447	8,156	11,174
Number of casualties in train, train-service and non-train accidents:				
Trespassers:				
Killed	175	192	952	954
Injured	119	134	771	788
Passengers on trains:				
(a) In train accidents*				
Killed	..	..	17	33
Injured	79	253	755	1,028
(b) In train-service accidents				
Killed	5	2	18	22
Injured	264	314	1,860	1,940
Travelers not on trains:				
Killed	..	..	5	6
Injured	77	89	676	625
Employees on duty:				
Killed	57	59	384	496
Injured	2,698	3,218	20,855	24,217
All other nontrespassers:**				
Killed	118	128	1,064	1,283
Injured	419	489	4,090	4,298
Total—All classes of persons:				
Killed	355	381	2,440	2,794
Injured	3,656	4,497	29,007	32,896

*Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of more than $150 to railway property in 1947. Beginning January 1, 1948, this minimum was raised to more than $250. Only a minor part of the total accidents result in casualties to persons.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers, and nontrespassers,* were as follows:

Persons:				
Killed	109	97	968	1,150
Injured	242	247	2,491	2,594

Proposes Intrastate Fare Revision For Roads Operating in Alabama

Examiner Howard Hosmer has recommended in a proposed report that the Interstate Commerce Commission find that intrastate passenger fares in Alabama should be raised to the level of interstate fares. The commission, he said, should enter an order to that effect, subject, however, to subsequent vacation in the event that the Public Service Commission of Alabama permits the establishment of the increased fares.

The report in the Docket No. 30015 proceeding is the result of an investigation launched by the commission in response to a petition filed by 11 carriers operating within Alabama (see *Railway Age* of July 3, page 41). The proposed increases, the report notes, would have produced additional annual revenue of $596,417 to nine of the roads in 1947.

Examiner Hosmer also noted that the commission, within the past year, has passed upon the reasonableness of the present interstate fares. "Since that time," he added, "railroad operating costs have continued upward and there can be no question as to the reasonableness of the interstate level today."

Shows State-to-State Flow Of 1948 1st-Quarter Traffic

The Bureau of Transport Economics and Statistics of the Interstate Commerce Commission has issued six tables showing, on a one-per-cent-sample basis, the state-to-state movements of tons of freight as represented by carload terminations reported by Class I railroads for the first quarter of 1948. The compilation is Statement No. 4838 of the bureau.

The statement is similar to the previously-issued compilations covering each of 1947's four quarters. The data are some of those being taken from waybills submitted in response to the commission's September 6, 1946, order requiring all Class I roads to file copies of audited waybills representing their carload terminations which are numbered "1" or with digits ending in "01."

The bureau also has issued Statement No. 4839, which shows the distribution of freight traffic and revenue averages by commodity groups and rate territories for this year's first quarter.

A.T.A. Convention Adopts Tax Report; Elects Horton President

Federal taxes "should not be levied against motor vehicle owners to cover all or in part the amount of federal participation in road development," but "there should be expeditious development of the national system of interstate highways at appropriate high standards," according to a taxation report by the board of directors of American Trucking Associations, which was adopted at the A.T.A. annual convention in Washington, D. C., last week. The convention was attended by more than 2,500 delegates and guests.

H. D. Horton, chairman of the board of Associated Transport, New York, was chosen president to succeed E. J. Buhner, chairman of the board of Silver Fleet Motor Express, Louisville, Ky. Mr. Buhner was elected chairman of the A.T.A. board, succeeding Ted V. Rodgers of Eachenbach & Rodgers, Scranton, Pa. Mr. Rodgers, who served as A.T.A's president for 14 consecutive terms from its beginning in 1933, was elected honorary chairman of the board for life.

The taxation report was described as one which "set up a pattern for long-range handling of a major highway transportation problem"; it is "advisory to the state associations and the indus-

try on principles covering highway planning, financing and taxation." The assertion that federal taxes should not be levied against motor vehicle owners to raise federal-aid highway funds was followed by the suggestion that federal highway aid "should be financed from general revenue funds." It was also recommended that the Federal-Aid Highway Act be amended "to provide incentives to states to grant full and complete reciprocity and to encourage adoption of anti-diversion laws."

Those two matters were also covered in other recommendations, that relating to "reciprocity" asserting that: "Any motor vehicle licensed to operate in one state should have the right to operate in any other state without acquiring any additional license plates or paying any additional registration fees. Reciprocity should be full, complete, and automatic." The recommendation as to "diversion" from highway purposes of taxes collected from highway users said there should be none of it. "Constitutional amendments," it added, "should be adopted in each state to prevent this practice. The funds that have been diverted should be recouped and used for their rightful purpose."

Uniform registration fees for all types of motor vehicles was also recomended. "The license plates," this recommendation said, "should be considered only as a means of vehicle identification and the registration fee charged should only cover the cost of providing the plates and administering the identification program." Elimination of all ton-mile taxes, gross receipts taxes, and what the report called other "third-structure levies," was demanded in another recommendation, which at the same time endorsed the motor-fuel tax. "The tax on motor fuel," it said, "is the soundest and fairest available gage of highway use and, therefore, should be the sole basis for raising that portion of highway costs that is properly assignable to motor vehicle operators."

The report further proposed the creation of highway study committees in each state to be composed of state legislators, "organized highway user representatives," and "other public elements as may be directly concerned with the long-range highway program." Among other things, the committee would pass on construction of toll bridges. Where permitted, the report held such bridges should be publicly-owned, that tolls should be collected solely for the purpose of paying for the structure and that once it was paid for, it should be opened as a free facility.

As to toll roads, the report said there should be none. "The present provisions of the Federal Aid Highway Act designed to prevent use of federal funds in construction of such roads should be strengthened to eliminate evasion of Congressional intent," it added.

Among other actions of the convention was the ratification by A.T.A.'s Regular Common Carrier Conference of a nationwide plan to interchange truck trailers. George Briggs of Eau Claire, Wis., chairman of that conference's interchangeability committee, said, however, that full realization of the plan would come only with "complete reciprocity between states, uniform size and weight laws, and standard license fees in all states."

E. C. Hof Elected Assistant Treasurer of Controllers Group

Edward C. Hof, controller of the American Brake Shoe Company, was elected assistant treasurer of the Controllers Institute of America at the organization's 17th annual meeting, held October 10-13, in New York. Mr. Hof has been active in the institute since 1936 and was a member of its board of directors from 1938 to 1941. He served as chairman of the admissions committee in 1938-39 and as chairman of the eligibility standards committee in 1940-41.

Ex Parte 166 Orders

The Interstate Commerce Commission on October 4 entered orders denying petitions whereby shippers and other interested parties had sought modifications as to various commodities of commission findings in the Ex Parte 166 freight rate increase case. Commodities to which the petitions related included lumber; roofing chips; animal glue stock and animal glue; sand, gravel, crushed stone and related commodities; clay; logs; marl; shells; limestone and limestone dust; livestock and fresh meat; switching charges on grain and grain products at St. Louis, Mo.,—East St. Louis, Ill.; brick, tile, and related articles; malt beverages and returned empty containers; and fresh fruits and vegetables.

Agriculture Department Discusses Traffic Diversion, Car Shortages

Diversion of traffic to lower-cost carriers, a move attributed to the increase in railroad and for-hire motor carrier freight rates, and the continuation of a "serious" shortage of freight cars, are among the subjects discussed by the Department of Agriculture's Bureau of Agricultural Economics in the latest issue of its monthly publication, "The Marketing and Transportation Situation." The issue is devoted chiefly to the outlook for 1949.

The bureau notes that post-war increases in rail freight through July, 1948, have raised the general level of rates about 44 per cent above those in effect at the middle of 1946, and will cost rail shippers, on the basis of Interstate Commerce Commission estimates, approximately $2,550 million more annually than under the rates in effect as of June 30, 1946.

"Railroads and for-hire motor carrier charges are believed by many to be reaching levels that encourage further diversion to lower cost carriers and may reduce the total traffic volume," the bureau states. "While this possibility will act as a deterrent to further rate increases, there nevertheless may be some further increases, depending largely upon the trend of carrier costs and traffic volume. There is little likelihood of substantial rate declines in the near future, except perhaps some readjustments for selected commodities or between a limited number of origins and destinations."

The bureau predicts that the estimated 17 per cent increase from 1947 to 1948 in rail and motor carrier freight rates will raise the national transportation bill for farm food products to approximately $350 million above the 1947 charges, while the 1948 bill for transporting all agricultural and related products will exceed that of 1947 by about $500 million. "These preliminary estimates," it notes, "indicate that probably as much as one-seventh of the total costs for processing, transporting and marketing food products from farmer to consumer is spent for inter-city transportation."

The bureau reports that the total inter-city transportation bill for the nation in 1947 is estimated to have been $12 billion, including payments to all public carriers and a "proportionate al-

NORTH WESTERN WILL BURY 2-TON "TIME CAPSULE" AT CHICAGO

A two-ton concrete "time capsule" containing a detailed photographic record of railroading as it exists today will be buried by the Chicago & North Western on October 25, at the site of Chicago's first railway depot. The burying of the capsule will commemorate the first run of a locomotive out of Chicago, made by the Galena & Chicago Union's "Pioneer."

The capsule, which is not to be opened until October 25, 2048, will contain more than 500 photographs contributed by 31 railroads serving Chicago. It is intended to "stop the clock" on the railroad industry as of 1948 and to give students of a century hence a comprehensive picture of the industry. In addition, the story of the railroads' "greatest show"—the Railroad Fair at Chicago—will be told in a series of pictures taken during the exposition's recent 76-day run.

Among those participating in the ceremony on the ground made famous by William Butler Ogden, first president of the North Western and Chicago's first mayor, will be the following: Mayor Martin H. Kennelly; R. L. Williams, president of the North Western; Major Lenox R. Lohr, president of the Railroad Fair, and Frank Taylor, vice-president of the Continental Illinois Bank & Trust Co., where the key to the time capsule will be held in trust.

The capsule will be lowered to a position 10 ft. below the level of the earth, where atomic scientists say it will be protected for a century from everything but a direct hit by an atomic bomb.

lowance" for private trucks. Of that total, it states, approximately 26 per cent went for transporting agricultural and related products at a cost of about $3 billion, while for farm food products only, the transportation bill is estimated at about $2 billion. "Since these estimates include not only the reasonably accurate information for the railroads but also rough approximations for motor carriers," the report adds, "they should be considered to have a considerable range of error and are useful as general indications only."

With respect to the shortage of freight cars, the bureau states that while rehabilitation and replacement of worn-out cars has shown improvement, service has not improved materially nor has there been an increase in the number of refrigerator and box cars in service as compared with the same period of 1947. "Consequently," it adds, "orders of the I. C. C. requiring heavy loading and placing certain restrictions upon the use of cars by shippers, especially for storage, will have to be continued and every effort made to utilize available facilities and capacity to the utmost if the high levels of production and movement of recent years are to be sustained."

The bureau goes on to assert that the production of freight cars in 1949, on the basis of present indications, will not exceed the present monthly rate of approximately 10,000. "At that rate," it states, "it will take a long time to obtain any substantial improvement in the number of cars available for service. As long as these conditions remain, the threat to the orderly movement of farm crops to market will continue and further efforts must be made to develop more efficient car utilization."

On the other hand, the bureau reports that production of new trucks remains at "high levels" and that increased use of trucks for direct delivery of crops from farm to final market is evident. "To the extent that expansion of truck use for such deliveries is possible," it adds, "risks of loss resulting from railroad freight car shortages can be minimized."

Adequate water transportation facilities for 1949 also are predicted by the bureau. In this connection, it noted that transportation of farm crops to primary markets by water is limited to certain products and areas, such as the movement of grain on the Great Lakes and inland rivers.

Truman Creates Emergency Board To Investigate Non-Op Dispute

President Truman on October 18 issued an executive order creating an emergency board to investigate the wage and hours dispute between the railroads and the 16 non-operating unions. Creation of an emergency board prior to the naming by the brotherhoods of a strike date follows the precedent set earlier this year in the dispute involving 18 short lines and 17 non-operating unions (see *Railway Age* of January 10, page 50).

As reported in *Railway Age* of September 25, page 59, negotiations between the non-ops and the carriers broke down September 17, resulting in the circulation of strike ballots by the brotherhoods. The National Mediation Board, which intervened in the dispute on September 23 at the request of the railroads, on October 6 reported its failure to bring the unions and carriers into accord on the wage demands. The N.M.B. proposed arbitration, which the railroads were considering at the time the brotherhoods declined the suggestion.

The non-ops are demanding a 25-cent-an-hour increase in wages, 48 hours pay for 40 hours work, a five-day week, time and one-half for Saturdays, and double time on Sundays and holidays, with eight hours minimum pay for any work on Saturdays, Sundays and holidays. The carriers estimate the cost of these demands at more than one and one-half billion dollars annually.

Orders Ex Parte 162 Increases Applied to Tennessee Rates

Adopting recommendations of a proposed report by Examiner F. L. Sharp, which was noted in *Railway Age* of July 13, page 42, the Interstate Commerce Commission has found that unjust discrimination against interstate commerce has resulted from the refusal of the Railroad and Public Utilities Commission of Tennessee to permit railroads operating within that state to apply Ex Parte 162 freight-rate increases to Tennessee intrastate rates. The report in Docket No. 29800 was by Commissioner Barnard; the accompanying order requires the railroads to establish the increased rates on November 20, meanwhile authorizing publication of the necessary tariffs on one day's notice.

The proceeding was instituted by the I. C. C. upon petition of interested railroads after the Tennessee commission originally had denied the carriers' petition for authority to increase intrastate rates within that state to the level auhorized by Ex Parte 162. The Tennessee commission, however, later modified its original opinion so as to authorize an increased scale of class rates up to 150 miles, among other minor revisions. It also permitted the Oneida & Western and Tennessee Central to increase their coal rates by varying amounts. Such increases, the I. C. C. found, should now be further increased only to the Ex Parte 162 level.

Studies submitted by seven carriers serving Tennessee, the commission's report noted, show estimated annual losses in revenue of $1,483,577, as the result of their failure to obtain increases on all Tennessee intrastate traffic equal to the increases in Ex Parte 162.

The report also included a denial of a motion filed by the carriers for an order requiring immediate establishment of intrastate rates in Tennessee on the same level as those authorized for interstate traffic under Ex Parte 166. In this connection, the I. C. C. urged the carriers promptly to petition the Tennessee commission for the relief deemed warranted under its orders in Ex Parte 166. The I. C. C. however, said it would give its "immediate consideration" to a request for a further hearing in the event "cause is shown" after the Tennessee agency has considered the petition.

Illinois Terminal to Operate Electric Streamliners

The Illinois Terminal received, on October 19, a new three-car streamlined passenger train for service between Decatur, Ill., and St. Louis, Mo. Named the "City of Decatur," the new train is electrically driven and consists of cars of the multiple-unit control type. Each car is equipped with four 140-h.p. electric motors geared to propel the cars at 80 m.p.h., with fully automatic acceleration. The exterior color scheme is polished fluted aluminum sides, with royal blue above the window sills.

The "City of Decatur" will be placed on exhibition at St. Louis, Granite City, Ill., Peoria, Springfield, Decatur and various intermediate points from October 26 to November 1. Its inauguration will be given wide publicity in advertisements in some 25 local newspapers. Visitors to the train will receive a booklet setting forth the features of the equipment, its cost and the service to which it will be assigned.

The new train will go into scheduled service on November 7, making its first trip out of Decatur at 8 a. m., with arrival in St. Louis at 11:15 a. m. It will leave St. Louis at 7 p. m., with arrival at Decatur at 10:20 p. m. Decatur has never before had through service to St. Louis via I. T.

The "City of Decatur" is the first of three identical three-car trains ordered by the road from the St. Louis Car Company. To make possible a speedup in schedule time, the road has erected a shelter platform at Monroe and 22nd streets in Granite City and equipped its belt line with automatic block signals so that some 20 blocks of street running may be avoided. A shuttle bus connects the shelter platform with the downtown station. A permanent station will probably be erected to replace the shelter platform.

N.A.R.U.C. 16th Annual Convention In Savannah, Ga., November 15-18

Discussions embodying such topics as the uniform classification problem, whether or not there should be a federal department of transportation and current developments in transportation rate regulation will highlight the 16th annual convention of the National Association of Railroad & Utilities Com-

missioners at the General Oglethorpe Hotel, Savannah, Ga., November 15-18.

Commissioner J. Hayden Alldredge of the Interstate Commerce Commission will lead the discussion with respect to the uniform classification problem. He will be assisted by B. M. Gray, special attorney, Kansas State Corporation Commission, and W. H. Gorman, director, Southern California branch office, California Public Utilities Commission.

The federal transportation department discussion will be led by Malcolm Erickson, chairman of the Public Utilities Commission of Colorado, while W. F. Whitney, of the Public Service Commission of Wisconsin, will preside over the discussion pertaining to current developments in transportation rate regulation.

September Employment

Railway employment decreased 0.29 per cent—from 1,354,327 to 1,350,421—during the one-month period from mid-August to mid-September, and the mid-September total was 0.97 below that of September, 1947, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-39 average, was 129.2 for September, as compared with 130 for August and 130.4 for September, 1947.

September employment was above that of September, 1947, in only three categories, the increases ranging from 0.39 per cent in maintenance of equipment and stores to 1.90 per cent in maintenance of way and structures. Decreases ranged from 1.30 per cent in the professional, clerical and general category to 5.60 per cent in transportation, other than train, engine and yard.

As compared with August, employment in September also increased only in three categories, ranging from 0.31 per cent in transportation, other than train, engine and yard, to 1.11 per cent in maintenance of equipment and stores. Decreases ranged from 0.09 per cent in the executives, officials and staff assistants group to 2.67 per cent in maintenance of way and structures.

U.P. Seeks Permission to Modify Automatic Train-Stop System

The Union Pacific has asked the Interstate Commerce Commission for authority to modify its automatic train-control installation between Portland, Ore., and The Dalles, 83 miles, by removing therefrom the train-stop and speed-control features.

The existing equipment, the road said, consists of a Union Switch & Signal Co. continuous-inductive, automatic train-control system carrying in combination the features of automatic stop, automatic speed control and automatic electric cab signals. The territory covered by the installation, it added, is also protected by an automatic electric block signal system consisting of two-and three-indication color-light signals using overlap system of controls. The proposed modification, it said, consists of dispensing with the train-stop and speed-control features and continuing in operation the cab signal feature supplemented with an audible cab signal. No changes are to be made in existing signal locations or "B" points.

The road told the commission the present pneumatic train-control equipment has been in service more than 23 years and has become obsolete. "It is difficult," it said, "to secure parts for the train-control apparatus due to the fact that the supplier has discontinued manufacturing them, except by hand method, for the relatively few installations still in service. This causes long delay and uncertainty in securing delivery of parts with the result that it is difficult and very expensive to keep the pneumatic equipment in proper working condition."

The U. P. also declared that removal of the pneumatic equipment from locomotives will effect a material reduction in expenditures. Because the runs of all its locomotives extend beyond the automatic train-control territory, it said, it is necessary to install and maintain the automatic train-control devices on numerous locomotives which operate mainly or largely in non-equipped territory. Such an investment, the road said, is "unproductive."

Freight Car Loadings

Loadings of revenue freight in the week ended October 16 totaled 913,832 cars, the Association of American Railroads announced on October 26. This was an increase of 22,021 cars, or 2.5 per cent, over the preceding week, a decrease of 40,317 cars, or 4.2 per cent, under the corresponding week last year and a decrease of 17,934 cars, or 1.9 per cent, under the equivalent 1946 week.

Loadings of revenue freight for the week ended October 9 totaled 891,811 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For the week ended Saturday, October 9

District	1948	1947	1946
Eastern	158,769	169,845	167,068
Allegheny	182,872	196,448	190,757
Pocahontas	69,328	73,313	69,742
Southern	130,795	140,279	133,065
Northwestern	138,654	152,853	135,989
Cent. Western	140,082	151,682	140,598
Southwestern	71,311	72,442	62,224
Total Western Districts	350,047	376,977	338,811
Total All Roads	891,811	956,862	899,443
Commodities:			
Grain and Grain Products	48,907	54,007	49,735
Livestock	18,882	23,983	23,682
Coal	176,346	191,142	185,266
Coke	14,609	15,080	14,349
Forest Products	45,131	47,971	46,374
Ore	67,937	68,013	60,361
Merchandise			
Miscellaneous	111,665	122,351	129,963
l.cl.	408,334	434,315	389,713
October 2	891,811	956,862	899,443
October 9	908,581	942,455	907,168
September 25	907,971	937,954	916,515
September 18	909,733	931,072	899,052
September 11	788,700	922,379	907,169
Cumulative total 40 weeks	33,814,120	35,004,989	32,224,983

In Canada.—Carloadings for the week ended October 9 totaled 91,293 cars, as compared with 90,671 cars for the previous week and 88,131 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 9, 1948 ..	91,293	37,145
October 11, 1947 ..	88,131	38,228
Cumulative totals for Canada:		
October 9, 1948 ..	3,170,582	1,508,858
October 11, 1947 ..	3,057,384	1,499,640

C. & O. 1947 ANNUAL REPORT CALLED BEST IN TRANSPORTATION

The Chesapeake & Ohio has been awarded a silver "Oscar of Industry" by the "Financial World" for what was adjudged to be the best corporate annual report for 1947 published in the transportation industry. The award was presented to Walter J. Tuohy, first vice-president of the road, at a banquet held on October 21 in the Hotel Pennsylvania, New York. A silver trophy also was presented to the Canadian National for the best annual report of all Canadian industry. The gold "Oscar" for the best stockholders' annual report issued by any American industry was won by the Marquette Cement Manufacturing Company of Chicago. The American Brake Shoe Company was awarded an "Oscar" for the best report in the railroad equipment industry.

J. B. Spencer Heads RR Supplies Group of Travelers Aid Campaign

J. B. Spencer, vice-president of the American Brake Shoe Company, has been appointed chairman of the Railway Supplies Division in the 1948 fund drive for the Travelers Aid Society of New York. Mr. Spencer is asking for contributions from men in his field to support the varied activities of the 43-year-old agency.

Supreme Court Refuses to Upset Mediation Board Determination

The United States Supreme Court has denied a petition for a writ of certiorari, thus leaving in effect rulings of lower courts which likewise refused to set aside a National Mediation Board determination that grouped engineers of the former Atlanta, Birmingham & Coast with Atlantic Coast Line engineers for the purpose of holding a representation election after the Coast

Line absorbed the A. B. & C. The Brotherhood of Locomotive Engineers, which represented A. C. L. engineers prior to the merger, won the election and thus extended its coverage to engineers of the former A. B. & C. (now the A. C. L.'s Western Division) who had been represented by the Brotherhood of Locomotive Firemen & Enginemen.

The grouping of the engineers was based on the construction the N. M. B. has placed on the pertinent provisions of the Railway Labor Act in previous similar cases, i.e., that "carrier-wide" bargaining units are required. The appeal to the courts was taken by 76 of the A. B. & C. engineers. Their complaint was dismissed by the United States District Court for the District of Columbia, and the dismissal was upheld by the Circuit Court of Appeals there. Those rulings were based on findings that the courts lacked jurisdiction to review N. M. B. certifications of collective-bargaining representatives.

Additional General News appears on pages 72 and 73.

ORGANIZATIONS

John W. Barriger, president of the Chicago, Indianapolis & Louisville, will address the luncheon session of the **Midwest Shippers Advisory Board** on October 28, at the Chamber of Commerce building in Fort Wayne, Ind.

The **National Association of Suggestion Systems** will hold its national fall conference at the Hotel Drake, Chicago, on November 8 and 9. Included in the line-up of speakers are J. M. Roche, director of personnel, Cadillac motor division of the General Motors Corporation; Ralph Damon, president of American Airlines; General Leslie Groves, Remington Rand vice-president; Harvey C. Marmaduke, Illinois Central executive representative; and W. S. Wilcox of the Socony-Vacuum Oil Company.

The next regular business meeting of the **Indianapolis Car Inspection Association** will be held in the committee room in the basement of the Indianapolis Union Station on November 1, at 7:00 p. m.

The **Northwest Shippers Advisory Board** will meet on October 28 at Fargo, N. D., when it will consider fall and winter rail transportation requirements of Minnesota, the Dakotas and Montana.

The **New York Division of Railroad Enthisiasts** will meet October 27 at 7:45 p.m., in room 5928, Grand Central Terminal. Colonel Robert S. Henry, vice-president, public relations, Association of American Railroads, will discuss the new A.A.R. radio program.

J. B. Blackburn, engineer of motive power of the Chesapeake & Ohio, will address the next meeting of the **Railroadians of America, New York Branch,** which has been scheduled for October 29, 7:30 p.m., at the railroad Y.M.C.A., Pennsylvania Station, New York. His subject will be "Modern Steam Power on the C. & O."

A meeting of the **Northwest Car Men's Association** is scheduled for November 1 at the Midway Club, 1931 University Avenue, St. Paul, Minn., at 8 p.m. A paper on Tightlock couplers will be presented through the courtesy of the National Malleable & Steel Castings Co.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Chicago & North Western System** has ordered 242 steel-sheathed, wood-lined, 50-ton box cars from the Pullman-Standard Car Manufacturing Company. Two hundred of the cars are for the Chicago, St. Paul, Minneapolis & Omaha and are scheduled for delivery next December. The 42 cars for the C. & N. W. will be delivered in November.

The **Green Bay & Western Lines** have ordered 20 50-ton hopper cars from the Pullman-Standard Car Manufacturing Company. Delivery of the cars, 10 of which are for the Kewaunee, Green Bay & Western, is expected in April, 1949.

The **Wisconsin Central** has ordered 20 70-ton covered hopper cars from the General American Transportation Corporation, subject to court approval. If the order is approved, the cars will be scheduled for delivery in the second quarter of 1949.

The **Denver & Rio Grande Western** is inquiring for 50 70-ton mill-type gondola cars, 200 70-ton flat-bottom gondola cars and 500 50-ton drop-bottom gondola cars.

The **Southern** has ordered 50 50-ton box cars from the Pullman-Standard Car Manufacturing Company for delivery next month.

The **Western Pacific** is inquiring for 250 70-ton drop-end gondola cars, of which 200 are to be 52 ft. long and 50 are to be 65 ft. long.

The **Mississippi Central** has ordered 100 50-ton box cars from the Pullman-Standard Car Manufacturing Company for delivery next April. An inquiry by this road for 200 such cars was reported in the *Railway Age* of July 24.

The **Missouri-Kansas-Texas** has ordered 500 70-ton hopper cars from the Pressed Steel Car Company. Delivery of the cars, which will cost over $2,250,000, is expected in April and May of next year.

SIGNALING

The **Baltimore & Ohio** has ordered equipment from the General Railway Signal Company to add eight levers to the present 72-lever electric interlocking machine in GN Tower, West Broad street, Columbus, Ohio. The new levers will control five signals and three switch machines at this interlocking, which involves crossings with the Pennsylvania and New York Central. This order also includes Types D, F, and G color-light signals; Type K relays; and Model 5A electric switch machines.

IRON AND STEEL

The **Missouri Pacific Lines** have received court authority to purchase 4,550 tons of 132-lb. rail and 43,310 tons of 115-lb. rail, costing $3,296,628, and ties, plates and spikes costing $2,272,288.

LOCOMOTIVES

More Diesels for Rock Island

The Chicago, Rock Island & Pacific plans, in the immediate future, to use Diesel power exclusively on its 300-mi. Kansas City, Mo.-St. Louis line and its "Choctaw" route from Memphis, Tenn., to Amarillo, Tex., 761 mi. The road's announcement followed delivery of five 4,500-hp. three-unit freight Diesel-electric locomotives built by the American Locomotive Company, which gives the road a total of 31 heavy Diesels for "Rocket" freight service. The Rock Island has three additional 4,500-hp. freight Diesels on order with Alco and 10 on order from Electro-Motive Division of General Motors Corporation.

The **Canadian Pacific** has placed orders for 23 Diesel-electric locomotive units to Dieselize completely its freight and passenger service between Montreal, Que., and Wells River, Vt., it has been announced by N. R. Crump, vice-president. The American Locomotive Company will build 12 1,500-hp. road freight, five 1,500-hp. road-switching and three 1,000-hp. yard-switching units and the Electro-Motive Division of the General Motors Corporation will construct three 2,000-hp. passenger units. Of the 12 road-freight units, eight are of the "A" type and four are of the "B" type. The switch from steam to Diesel power on the 172-mile run, hastened by the necessity of replacing or rebuilding 41 steam

locomotives, Mr. Crump said, will be made on delivery of the new motive power next year. Passenger trains affected by the change-over include two Montreal-Boston, Mass., trains, the "Alouette" and the "Red Wing," and the Montreal-Newport, Vt., local. Also affected will be the interchange freight traffic handled by the C.P.R. between Wells River and Windsor, Ont., to the midwestern United States. The Montreal-Wells River run will be the second C.P.R. operation to become Dieselized. The Esquimault & Nanaimo, a C.P.R. subsidiary on Vancouver Island, is being changed over within the next few months upon receipt of 13 Diesel-electric locomotives ordered last year.

SUPPLY TRADE

R. E. W. Harrison, vice-president of the Chambersburg Engineering Company, has resigned to re-establish his own consulting service, with headquarters in New York.

Roland Whitehurst, Exide sales manager, has been elected vice-president in charge of sales of the **Electric Storage Battery Company** to succeed **Frank T. Kalas,** who has retired after 49 years of service with the firm.

Frank F. Ford and **Clement N. Page** have been appointed sales representatives for the **Great Lakes Steel Corporation's** nailable steel flooring. Mr. Ford, who will be located in Atlanta, Ga., has been connected with the alloy and Stran-steel divisions of the company. Mr. Page will have offices in Philadelphia, Pa. He was formerly associated with the Evans Products Company.

C. I. MacGuffie and **R. C. Freeman** have been appointed, respectively, manager of sales and manager of engineering of the **General Electric Company's** electric welding divisions.

CONSTRUCTION

Grand Trunk Western.—This road has awarded a contract to the Charlson Company, Wyandotte, Mich., for construction of an enginemen's rest house and locker building at Detroit, Mich., at an estimated cost of $30,000.

A contract has also been awarded to Darin & Armstrong, Inc., Detroit, for the construction of a 25-ft. extension to six stalls in the roundhouse at Detroit, to permit accommodation of larger type locomotives.

New York Central.—This road has announced plans for improvements in its V.I. yard at East Buffalo, N. Y., and in its Selkirk classification yard, nine miles south of Albany, N. Y. The Selkirk project will include five additional tracks to be built on the south side of the yard and the extension of six tracks on the north end. New offices will be built at each end of the yard, track changes will be made at the yard's ice plant and a new roadway for buses and automobiles will be constructed. Improvements at the V.I. yard will include construction of an additional 3,375 ft. of track, relocation of five turnouts within the yard and the building of a small concrete block yard office building. Four of the yard tracks at the east end will be lengthened. Additional water lines will be installed at the Albany passenger station because of the increased number of Diesel-electric locomotives being used in the road's passenger service.

ABANDONMENTS

Chicago, Burlington & Quincy.—Examiner A. G. Nye has recommended in a proposed report that Division 4 of the Interstate Commerce Commission deny a petition filed by the Brotherhood of Railroad Trainmen requesting imposition of protection conditions for employees who may have been adversely affected by this road's 1943 abandonment of a line from Tecumseh Junction, Neb., to Rockford, 24 miles; operation under trackage rights over the Chicago, Rock Island & Pacific between Rockford and Beatrice, 8.4 miles, and a 264-ft. connecting track at Beatrice.

In approving the abandonment, the commission reserved jurisdiction for two years to consider whether protection conditions should be imposed. In 1943, on petition of the Railway Labor Executives' Association, Brotherhood of Maintenance of Way Employees, Brotherhood of Locomotive Firemen & Enginemen and Order of Railway Conductors, the period for considering imposition of employee-protection conditions was extended for two years. In 1947, on petition of the B. of R. T., the proceeding was reopened for further hearing.

The B. of R. T., the examiner said, alleged at the further hearing that the officers of its general committee failed to reach an agreement with the Burlington with respect to certain employees who the union said have been adversely affected by the abandonment. He went on to note that, while B. of R. T. representations originally related only to three brakemen, it later claimed to represent all employees who may have been adversely affected. Unions representing enginemen and firemen, conductors and maintenance of way employees, however, did not join the B. of R. T. in its petition nor did they participate in the further hearing.

Examiner Nye said that a "fair appraisal" of the evidence leads to the conclusion that no employee has suffered any adverse effects and that public convenience and necessity therefore do not require imposition of any terms and conditions. "The fact that other organizations whose members worked with the brakemen and were governed more or less by the same rules and regulations and experienced somewhat the same working conditions before and after the abandonment have not joined the petitioner in the later hearing, although they were represented at the earlier one, is indicative of the lack of merit of the petitioner's contentions," he commented. At the same time, he pointed to evidence introduced by the Burlington showing that all displaced employees, except those who exercised or waived seniority rights, continued in service and earned more compensation for less hours during the four years following the abandonment than during the year before.

Application has been filed with the Interstate Commerce Commission by:

Maine Central.—To abandon that portion of its line from Coos Junction, N. H., to North Stratford, 19.2 miles. The applicant, which now operates under trackage rights over the Boston & Maine between Coos Junction and Groveton, N. H., also seeks authority to operate under trackage rights over the Canadian National between Groveton and North Stratford. Approval of the application, the M.C. said, will afford a satisfactory connection between its line between North Stratford and Beecher Falls, Vt., and the remainder of its system.

FINANCIAL

Alabama Great Southern.—*Acquisition.*—This road has applied to the Interstate Commerce Commission for authority to purchase from its parent company, the Southern, for $145,000, a line extending from Attalla, Ala., to Gadsden, 7.1 miles. The segment is part of a line which the commission authorized the Southern to abandon, as reported in *Railway Age* of August 7, page 48. The line, the applicant said, forms an integral part of its system and therefore should be owned by it.

Helena & Northwestern. — *Acquisition.*—This new company has applied to the Interstate Commerce Commission fora authority to acquire and operate a line abandoned by the Missouri & Arkansas. The line extends between Helena, Ark., and Cotton Plant, approximately 55 miles. The acquisition would be financed through the sale of capital stock.

Abandonment of the segment which the H. & N. proposes to acquire was authorized by the commission's Division 4 in August, at which time the M. & A.

was permitted, subject to certain disposal conditions, to abandon its entire line of approximately 335 miles. The road also was authorized to abandon operations under trackage rights agreements over approximately 30 miles of four other carriers. Howeve, as reported in *Railway Age* of October 16, page 86, the effective date of that order now has been extended to December 7 and the proceeding reopened for reconsideration and assigned for oral argument on November 12 before the entire commission at Washington, D. C.

New York, Chicago & St. Louis.—*Lease.*—This road and the Wheeling & Lake Erie, in a joint application filed with the Interstate Commerce Commission, seek approval of an indenture whereby all lines and certain other properties and rights of the W. & L. E. will be leased by the Nickel Plate for a 99-year period. The lease would be renewable for like terms perpetually. The Nickel Plate told the commission that approval of the transaction will enable it to acquire further control of the W. & L. E. in addition to that presently exercised by virtue of its ownership of approximately 80 per cent of the W. & L. E.'s voting stock.

The Nickel Plate also seeks authority to assume obligations and liabilities on all mortgage bonds and other securities and obligations in respect of which the W. & L. E. is liable, to make certain rental payments, and, if necessary, to issue securities in connection with its acquisition of W. & L. E. shares tendered by dissenting stockholders of that road.

Pennroad.—*To Sell D.T.& I. to P.R.R.*—The Pennroad Corporation this week said negotiations are under way for purchase by the Pennsylvania Company, a wholly-owned railroad holding company of the Pennsylvania Railroad, of the entire outstanding capital stock, amounting to 245,329 shares of the Detroit, Toledo & Ironton. M. W. Clement, president of the P.R.R., said in a letter dated October 13 and sent to Benjamin F. Pepper, president of Pennroad, that the Pennsylvania Company would buy the D. T. & I. stock at $105.50 a share. On the following day Mr. Pepper said Pennroad was willing to sell at that price, subject to Interstate Commerce Commission approval of the transaction.

Wilkes-Barre & Scranton.—*Bonds.*—This road, a subsidiary of the Lehigh Coal & Navigation Co., has applied to the Interstate Commerce Commission for authority to extend from May 1, 1948, to May 1, 1973, the maturity date of $500,000 of its 4½ per cent first mortgage bonds held by the Lehigh company.

New Securities

Application has been filed with the Interstate Commerce Commission by:

Illinois Terminal. — To assume liability for $1,000,000 of series D equipment trust certificates, the proceeds of which would be applied toward the purchase of 300 50-ton steel-sheathed box cars from the American Car & Foundry Co. The cost of the cars will range from $4,070 to $4,475 each. The certificates would be dated November 1, would be sold on the basis of competitive bidding and mature in 20 semi-annual installments, starting May 1, 1949.

Missouri-Kansas-Texas.—To issue at par to the Republic National Bank of Dallas, Tex., a promissory note not to exceed $1,850,000. The note would evidence a loan of like amount, proceeds of which would be applied toward payment of $1,877,519 due the federal government for income and excess profits taxes. The note would bear interest at 3⅛ per cent and be payable in 48 monthly installments of $38,541, starting 30 days after the date of the note, which has not yet been determined. As collateral security, the applicant proposes to pledge and repledge from time to time its prior lien 4 per cent series F bonds.

St. Louis-San Francisco. — To assume liability for $4,260,000 of series C equipment trust certificates, proceeds of which would be applied toward purchase of six 4,500-hp. Diesel-electric freight locomotives, 400 70-ton steel gondola cars and 100 55-ton steel open-top hopper cars. Four of the locomotives will be acquired from Electro-Motive Division of General Motors Corporation for $470,765 each and two from American Locomotive Company at $472,080 each. The gondolas, to cost $6,175 each, and the hoppers, to cost $3,880 each, will be acquired from Pullman-Standard Car Manufacturing Company. The certificates would be dated November 1, and be payable serially in equal annual installments of 10 or 15 years, as may be determined upon receipt of bids. The rate of interest on the certificates also would be determined by competitive bidding.

Waterloo, Cedar Falls & Northern.—To change each share of its present no par value stock, carried at a stated value of $30 per share, into three shares of common capital stock, par value $10 per share. The applicant's authorized capital stock is 60,000 shares, of which 56,510 shares are issued and outstanding. The proposed transaction, the applicant said, would give the stock a wider market, increase the number of stockholders and enable a price to be obtained more nearly approximating the true value of the stock in the event it is sold for future requirements.

Division 4 of the I.C.C. has **authorized:**

Chicago, Milwaukee, St. Paul & Pacific.—To assume liability for $6,600,000 of series FF equipment trust certificates, proceeds of which will be applied toward purchase of 2,600 freight cars, as described in *Railway Age* of September 25, page 72. The certificates will be dated October 1 and will mature in 20 semi-annual installments of $330,000, starting April 1, 1949. The report also approves a selling price of 99.4317 with a 2¼ per cent interest rate, the bid of Harriman Ripley & Co., and Lehman Brothers, on which basis the average annual cost will be approximately 2.37 per cent. The certificates were reoffered to the public at prices yielding from 1.5 to 2.5 per cent, according to maturity.

Illinois Central.—To assume liability for $3,240,000 of series Y equipment trust certificates, final installment of an overall issue of $11,360,000 of series Y certicates, total proceeds of which will be applied toward purchase of 3,815 all-steel freight cars, as described in *Railway Age* of August 2, 1947, page 62. The certificates will be dated August 1, and will mature in 18 semi-annual installments of $180,000, starting February 1, 1949. The report also approves a selling price of 99.092 with a 2⅛ per cent interest rate, the bid of Harriman Ripley & Co. and Lehman Brothers, on which basis the average annual cost will be approximately 2.34 per cent. The certificates were reoffered to the public at prices yielding from 1.5 per cent to 2.45 per cent, according to maturity.

Dividends Declared

Georgia.—$1.75, quarterly, payable October 15 to holders of record October 1.

Northern of New Hampshire. — $1.50, quarterly, payable October 30 to holders of record October 14.

Philadelphia & Trenton.—$2.50, quarterly, payable October 11 to holders of record October 1.

Average Prices Stocks and Bonds

	Oct. 19	Last week	Last year
Average price of 20 representative railway stocks	49.27	48.21	49.28
Average price of 20 representative railway bonds	88.72	88.58	87.46

RAILWAY OFFICERS

EXECUTIVE

W. I. Rankin, whose election as president and treasurer of the Piedmont & Northern and the Durham & Southern at Charlotte, N. C., was reported in the *Railway Age* of October 2, was born on February 27, 1895, in Gaston county, near Mount Holly, N. C., where he attended the public schools. Mr. Rankin entered railroad service in 1911 as a clerk in the freight office of the Seaboard Air Line at Mount Holly, subsequently serving the Southern at Shelby, N. C., and Greenville, S. C. On January 1, 1915, he went with the Piedmont & Northern at Charlotte, becoming agent at Mount Holly in March, 1916, and transferring to Spartanburg, S. C., three months later. After service in World War I, Mr. Rankin returned to the P. & N. and was given supervision of overcharge claims in the accounting office at Charlotte until February 28, 1920. Upon the return of the railroads to private operation from government control on March 1, 1920, Mr. Rankin became agent at Charlotte, serving in that capacity until September 1, 1922, when he became commercial agent at Anderson, S. C., returning to Charlotte on May 1, 1925. The following November he was appointed general freight and passenger agent at

Greenville and on June 1, 1933, he became freight traffic manager of the Piedmont & Northern and the Durham & Southern at Greenville. On April 1, 1934, Mr. Rankin became traffic manager of both roads and on June 1, 1938, his office was transferred to Charlotte.

W. I. Rankin

In March, 1941, he was elected vice-president and traffic manager of the two roads, becoming vice-president and treasurer in March, 1946, which positions he held until his election as president and treasurer.

Lewis W. McCoy, whose election as vice-president of the Bessemer & Lake Erie at Pittsburgh, Pa., was reported in the *Railway Age* of October 9, was born at Ashtabula, Ohio, on February 7, 1880. Mr. McCoy entered railroad service with the Bessemer & Lake Erie on April 28, 1897, and was appointed

Lewis W. McCoy

traveling auditor on February 1, 1905, becoming chief clerk in August, 1910. He was advanced to assistant general auditor in January, 1919, and became general auditor at Pittsburgh in September, 1940. On February 14, 1946, Mr. McCoy was elected comptroller at Pittsburgh, which position he held until his recent election as vice-president.

Herbert W. Ward, whose election as president of the Illinois Terminal, with headquarters at St. Louis, Mo., was reported in *Railway Age* of September 25, was born on April 24, 1894, at Spooner, Wis. Mr. Ward received his higher education at the Minnesota College of Law, having been awarded the LL.B. degree in 1934. He began his career with the Minneapolis & St. Louis in 1908 as a clerk in the tariff department, and in 1910 joined the Chicago, St. Paul, Minneapolis & Omaha as a

Herbert W. Ward

clerk. He subsequently held successive positions with that road as brakeman, conductor, traveling freight and passenger agent at Duluth, Minn., and city freight agent at Minneapolis, Minn. Mr. Ward rejoined the M. & St. L. in 1935 as general freight agent, advancing to traffic manager in 1936 and to general traffic manager in 1938. He was advanced in 1943 to vice-president—traffic, which post he held until May of this year, at which time he joined the Illinois Terminal as executive vice-president. Mr. Ward was serving in the latter capacity at the time of his election as president of the road.

Frank J. Berry, western traffic manager of the Northern Pacific at Seattle, Wash., has been advanced to assistant vice-president, with headquarters at St. Paul, Minn.

FINANCIAL LEGAL and ACCOUNTING

Charles H. Morton, real estate assistant to vice-president of the New York Central system, has been appointed general land and tax agent, with headquarters as before at New York, succeeding **L. C. James,** who will retire on November 1. Mr. Morton joined the New York Central in December, 1923, as assistant land and tax agent at Utica, N. Y., subsequently becoming land and tax agent there. On January 1, 1928, he was transferred to New York, later becoming assistant general land agent. Mr. Morton was appointed real estate assistant to vice-president on June 1, 1935.

Mr. James has served as the New York Central's general land and tax agent since March 1, 1929. He spent the previous 20 years with the road at Cleveland, Ohio, where he was general

Charles H. Morton

land and tax agent for the Central's Lines West from June 1, 1917, until his promotion to general land and tax agent at New York.

OPERATING

A. Hart, superintendent of the Hudson and Mohawk division of the New York Central at Albany, N. Y., has been appointed assistant general manager of the Boston & Albany (N.Y.C. lessee) at Boston, Mass. **R. G. May,** assistant division superintendent at New York, succeeds Mr. Hart at Albany. **J. V. Hughes,** trainmaster at New York, has been promoted to assistant superintendent of the Electric, Harlem and Putnam divisions, also at New York. **C. D. Buford** and **Arthur B. Winn,** road foreman of engines at New York have been appointed trainmasters of the Electric, Harlem and Putnam divisions, at New York. **C. B. Davenport,** trainmaster at New York, has been transferred to the St. Lawrence, Ottawa and Adirondack divisions at Watertown, N. Y., succeeding **J. S. Davis,** who has been transferred to Malone, N. Y.

William B. Salter, superintendent of the Canada division of the Michigan Central (New York Central system) at St. Thomas, Ont., has been appointed assistant general manager of the Toronto, Hamilton & Buffalo, with headquarters at Hamilton, Ont., succeeding **Thomas L. Coughlin,** deceased. Mr. Salter was born in New York in 1906 and began work with the New York Central as a messenger in 1925 in the office of the freight transportation manager at New York. After several promotions he became a traveling car agent and then transferred to the operating department as assistant trainmaster of the Michigan Central at Buffalo, N. Y., in 1940. The following year he was appointed trainmaster at St. Thomas,

Ont., and in 1945 transferred to Kalamazoo, Mich. He was promoted to assistant superintendent at Chicago in 1946, shifting later in the same year to Niles, Mich. Mr. Salter has been superintendent of the Canada division since August, 1947.

TRAFFIC

Malcolm N. Vienne has been appointed general western agent of the Norfolk Southern at Chicago. **Earl C. Kolson** has been appointed general agent at Pittsburgh, Pa. **J. K. Powell,** division freight agent at Charlotte, N. C., has retired after 48 years of active railroad service, the last 35 of which have been with the N. S.

Edward M. Petschl, city ticket agent of the Chicago & North Western system at Minneapolis, Minn., has been appointed assistant general passenger agent at that point.

Lloyd L. Leonard has been appointed general agent of the Missouri-Kansas-Texas of Texas, with headquarters at El Paso, Tex., succeeding **Lastro Warren,** who has been transferred, at his own request, to Fort Worth, Tex., as traveling freight and passenger agent, succeeding Mr. Leonard.

A. M. Fitch, assistant general passenger agent of the St. Louis Southwestern, at Dallas, Tex., and **L. C. Barry,** mail, baggage and express agent, at Texarkana, Tex., retired on October 15.

Arne L. Strom, assistant to western traffic manager of the Great Northern, with headquarters at Seattle, Wash., has been appointed assistant industrial agent, succeeding **L. W. Jager,** who has been granted a leave of absence because of illness. Mr. Strom is succeeded by **Lyle E. Moore,** traveling freight agent at Klamath Falls, Ore.

MECHANICAL

G. E. Lund, whose appointment as acting district master mechanic of the Western district of the Erie at Meadville, Pa., was reported in the *Railway Age* of October 9, page 92, has been appointed district master mechanic of that district, succeeding **G. L. Fisher,** deceased.

W. F. Sinclair has been appointed to the newly-created post of general supervisor of Diesel equipment of the Canadian Pacific, with headquarters at Montreal, Que. Mr. Sinclair had been research assistant and senior research engineer since 1946, assigned to a series of studies on Diesel power which led to the use of Diesel switching engines in a large number of C.P.R. yards across the country and the decision to Dieselize completely the subsidiary Esquimalt & Nanaimo lines on Vancouver Island, B. C.

J. G. Hunt, general Diesel instructor of the New York Central system at New York, has been appointed general supervisor Diesel locomotive maintenance at New York, succeeding **C. L. Hall,** transferred.

ENGINEERING and SIGNALING

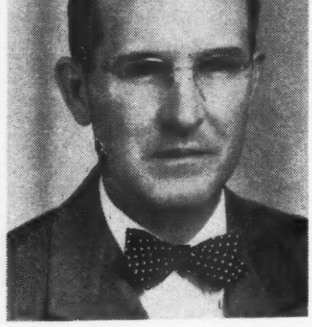
C. D. McKenzie, assistant engineer of the Great Northern, with headquarters at Superior, Wis., has been advanced to division engineer at that point, succeeding **Ralph P. Maynard,** who has retired.

T. G. Inwood, signal supervisor of the New York Central at Chicago, will retire on October 31. Mr. Inwood was born on October 9, 1883, at Lottsville, Pa., and began his railroad career in 1900 with the Lake Shore & Michigan Southern (now part of the N.Y.C. system). Mr. Inwood entered the service of the New York, Chicago & St. Louis in 1902 as a freight clerk at Westfield, N. Y., returning to the L. S. & M. S. as a wireman in the signal department in 1904. He subsequently advanced to signal gang foreman at Elkhart, Ind., and to assistant signal supervisor of the Western signal district there. He was appointed signal supervisor of the N. Y. C. at Elkhart in 1919, and was transferred in 1921 to Chicago in the position from which he is now retiring.

W. O. Cudworth, who has been on leave of absence because of illness, has resumed duty as special engineer of the Canadian Pacific, with headquarters at Toronto, Ont.

SPECIAL

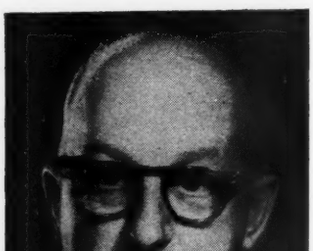
Carl D. Norman, whose appointment as superintendent of safety, Texas & Pacific, at Dallas, Texas, was reported in the *Railway Age* of October 2, first



Carl D. Norman

entered T. & P. service in 1927 as a clerk in the office of superintendent of transportation. Mr. Norman subsequently held various clerical positions, and in 1936 he was transferred to the office of operating vice-president as general clerk. Following army service during World War II, he returned to the T. & P. in 1945 in his last-held position. Mr. Norman was serving as general clerk in the operating vice-president's office at the time of his appointment as superintendent of safety.

George H. Hill, who for the past five years has been official photographer for the Boston & Maine and the Maine Central, has been appointed publicity manager of the two roads. **Clifford A. Somerville,** who has been editor of the monthly magazines published by the two roads, has been named editor-in-chief. **James R. Doty,** assistant advertising agent of the B. & M., has been promoted to advertising agent, with supervision of advertising for that road and the Maine Central.



George H. Hill

Mr. Hill served for 25 years as a news photographer in New England for the Boston Post, Globe and Herald and later as New England manager for Wide World Photo Service, resigning the latter position in 1944 to become associated with the B. & M. and the Maine Central. Mr. Hill filmed "Summer in New England," "Industrial New England" and "The Snow Train" in colored motion pictures, and his films were among those shown in the theatre section of the Eastern Railroads exhibit at the recent Chicago Railroad Fair.

OBITUARY

O. F. Cooper, advertising agent of the Atlantic Coast Line at Wilmington, N. C., died suddenly in that city on October 16, as a result of a heart attack, at the age of 69.

Robert E. Labbe, who retired in December, 1947, as treasurer of the Pacic Electric, died at his home in Los Angeles, Cal., on October 1. He was associated with the P. E. for 42 years, beginning as a clerk in 1905 and advancing to treasurer in 1945.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1948

Name of road		Ave. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating Expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax-accruals	Net railway operating income 1948	Net railway operating income 1947
Akron, Canton & Youngstown	Aug.	171	512,822	97	533,885	76,627	45,225	25,957	140,336	308,880	57.9	225,005	84,623	116,696	55,589
	8 mos.	171	3,753,339	618	3,913,047	553,938	373,420	207,991	1,084,865	2,408,482	61.6	1,504,565	562,183	767,850	522,637
Atchison, Topeka & Santa Fe System	Aug.	13,080	36,569,134	5,078,729	45,924,296	6,634,998	8,026,796	870,981	15,475,384	32,935,823	71.7	12,988,473	6,293,584	6,556,807	4,593,910
	8 mos.	13,081	279,563,896	35,579,644	344,546,120	52,001,649	59,479,668	7,507,897	121,873,106	254,760,717	73.9	89,785,403	44,751,492	43,960,729	33,837,141
Atlanta & St. Andrews Bay	Aug.	82	194,436	2,454	204,884	26,819	13,821	6,224	57,299	114,038	55.7	90,846	30,739	39,633	22,443
	8 mos.	82	1,528,417	13,000	1,599,303	188,977	119,443	49,692	411,575	857,326	53.6	741,977	264,617	314,448	197,370
Atlanta & West Point	Aug.	93	287,503	54,425	385,953	42,992	49,719	13,144	180,841	309,195	80.1	76,758	36,566	24,204	32,779
	8 mos.	93	2,259,529	423,931	3,043,400	317,737	406,506	108,860	1,473,392	2,481,642	81.5	561,758	269,839	135,855	—6,125
Western of Alabama	Aug.	133	297,394	54,655	387,107	42,715	63,119	13,251	164,576	304,361	78.6	82,746	41,700	41,443	38,179
	8 mos.	133	2,267,767	416,552	2,967,194	319,132	466,147	108,495	1,271,867	2,324,146	78.3	643,048	346,777	291,830	167,403
Atlantic Coast Line	Aug.	5,568	7,760,004	1,582,942	10,085,570	2,167,493	2,141,770	282,256	4,489,401	9,565,749	94.8	519,821	700,000	—251,391	—596,863
	8 mos.	5,571	72,963,721	14,206,183	94,048,985	16,834,199	15,596,559	2,333,569	39,305,994	78,130,033	83.1	15,918,952	8,150,000	5,437,292	2,077,618
Charleston & Western Carolina	Aug.	343	428,757	6,359	446,282	69,016	70,787	14,308	167,900	333,829	74.8	112,453	40,000	62,011	11,661
	8 mos.	343	3,314,161	32,816	3,437,333	600,726	600,707	114,962	1,370,746	2,769,707	80.6	667,626	265,000	312,876	250,095
Baltimore & Ohio	Aug.	6,192	31,470,924	2,403,294	35,874,582	4,610,977	7,335,965	740,089	14,101,513	28,182,117	78.6	7,692,465	2,927,910	4,379,992	2,610,632
	8 mos.	6,192	233,408,969	16,151,725	264,366,772	31,580,386	53,528,298	5,635,842	111,412,319	213,124,686	80.6	51,242,086	20,282,164	29,247,268	20,595,738
Staten Island Rapid Transit	Aug.	29	184,561	89,908	289,359	65,463	41,531	1,592	168,433	303,588	104.9	—14,229	18,355	—52,073	—36,030
	8 mos.	29	1,454,158	853,379	2,430,910	474,393	338,694	13,067	1,289,831	2,348,276	96.6	82,634	310,447	—392,733	—353,706
Bangor & Aroostook	Aug.	602	643,099	58,037	728,647	262,284	156,656	8,930	227,499	697,402	95.7	31,245	66,642	19,743	—45,191
	8 mos.	602	9,603,747	374,645	10,269,285	1,909,615	1,529,962	67,737	2,816,277	6,680,622	65.0	3,588,663	1,672,214	1,961,822	1,119,392
Bessemer & Lake Erie	Aug.	214	2,994,111	3,334	3,014,030	173,791	680,176	17,913	582,363	1,524,166	50.6	1,489,864	751,707	987,634	993,348
	8 mos.	214	16,867,030	12,068	17,013,891	1,284,575	4,137,478	150,142	3,758,885	9,885,239	58.1	7,128,652	3,986,451	5,339,715	5,084,693
Boston & Maine	Aug.	1,757	5,869,127	1,561,307	8,152,520	1,264,400	1,169,388	111,047	3,134,330	5,983,653	73.4	2,168,867	938,629	930,053	505,448
	8 mos.	1,757	46,707,361	10,009,634	62,404,224	10,485,457	9,295,054	816,834	25,859,373	48,894,047	78.4	13,510,177	5,566,142	4,893,574	3,893,358
Burlington Rock Island	Aug.	228	310,831	66,557	401,465	44,917	46,164	4,568	163,847	279,922	69.8	121,543	9,769	62,609	102,171
	8 mos.	228	2,435,574	434,805	3,033,582	397,087	304,378	37,650	1,194,300	2,091,542	68.9	942,040	79,342	460,636	153,114
Cambria & Indiana	Aug.	35	156,705	.....	156,763	8,918	56,728	671	25,657	99,649	63.6	57,114	81,043	101,434	49,909
	8 mos.	35	951,911	.....	952,302	93,674	729,883	5,956	180,919	1,075,978	113.0	—123,676	466,500	335,548	289,086
Canadian Pacific Lines in Maine	Aug.	234	269,833	48,464	341,894	76,447	47,523	7,966	135,654	280,962	82.2	60,932	22,050	—10,785	—72,305
	8 mos.	234	3,577,876	291,806	4,061,131	691,388	541,104	58,331	1,607,357	2,999,926	73.9	1,061,205	185,350	288,619	153,568
Canadian Pacific Lines in Vermont	Aug.	90	144,771	24,658	188,364	36,066	33,590	5,761	144,924	227,651	120.9	—39,287	12,043	—95,465	—81,966
	8 mos.	90	1,291,762	124,710	1,566,957	337,373	263,046	41,799	1,229,719	1,927,961	123.0	—361,004	106,857	—826,218	—819,007
Central of Georgia	Aug.	1,815	2,577,503	286,836	3,108,879	512,197	510,650	98,415	1,437,740	2,721,526	87.5	387,353	181,593	215,376	—16,482
	8 mos.	1,815	20,971,623	2,065,392	25,156,111	3,908,234	4,010,290	820,081	11,719,497	21,773,312	86.6	3,382,799	1,903,535	1,305,166	—403,392
Central of New Jersey	Aug.	417	2,875,123	638,967	3,736,314	550,074	574,115	52,490	1,752,306	3,098,313	82.9	638,001	399,697	—40,920	—166,085
	8 mos.	417	21,985,269	4,344,695	28,260,324	4,311,788	4,668,942	428,780	14,144,510	25,035,703	88.6	3,224,621	3,202,468	—2,502,166	—2,527,314
Central of Pennsylvania	Aug.	213	1,863,692	17,837	1,922,534	179,093	293,618	23,401	567,330	1,105,649	57.5	816,885	78,877	1,011,427	747,076
	8 mos.	213	13,398,768	146,558	13,851,853	1,237,296	2,464,353	187,793	4,348,208	8,572,521	61.9	5,279,332	556,527	6,845,259	5,310,628
Central Vermont	Aug.	422	670,000	97,000	829,000	176,369	151,750	13,897	357,923	732,033	88.3	96,967	46,193	—2,974	88,138
	8 mos.	422	5,937,000	524,000	6,904,000	1,154,199	1,122,214	108,001	2,947,661	5,629,782	81.5	1,274,218	359,942	478,299	354,958
Chesapeake & Ohio	Aug.	5,075	29,681,692	1,214,925	32,504,247	4,513,466	5,205,450	580,753	10,563,704	22,104,153	68.0	10,400,094	4,662,541	6,076,058	4,959,107
	8 mos.	5,074	202,015,411	7,628,762	219,585,819	31,972,525	40,732,508	5,662,136	78,907,506	167,381,885	76.2	52,203,934	26,353,872	29,712,311	29,896,433
Chicago & Eastern Illinois	Aug.	909	2,164,121	376,049	2,788,465	386,579	538,227	92,837	1,116,561	2,271,671	81.5	516,794	183,400	185,678	105,372
	8 mos.	909	16,831,066	2,448,579	21,279,360	2,803,750	3,944,328	775,181	9,021,937	17,551,317	82.5	3,728,043	1,445,100	1,342,544	421,198
Chicago & Illinois Midland	Aug.	131	938,635	1,075	967,015	89,743	138,859	27,303	203,744	487,637	50.4	479,378	186,396	280,186	174,083
	8 mos.	131	5,925,189	7,338	6,087,683	707,623	998,376	198,568	1,521,107	3,695,026	60.7	2,392,657	1,012,955	1,372,842	947,335
Chicago & North Western	Aug.	8,058	13,517,443	2,741,451	18,077,961	2,686,748	2,855,343	296,992	7,347,910	14,001,207	77.4	4,076,754	1,771,702	1,772,123	1,130,115
	8 mos.	8,058	95,942,973	17,417,301	126,936,425	19,839,846	23,535,814	2,427,420	56,977,089	109,068,748	85.9	17,867,677	9,204,008	6,135,242	5,025,003
Chicago, Burlington & Quincy	Aug.	8,867	19,231,683	2,169,390	23,261,656	3,678,664	2,873,567	358,213	7,190,183	14,821,782	63.7	8,439,874	3,913,493	4,002,673	3,843,016
	8 mos.	8,867	129,408,474	13,500,844	156,952,576	23,778,142	22,761,812	3,130,163	54,405,925	109,524,961	69.8	47,427,615	22,790,656	21,378,028	20,691,872
Chicago Great Western	Aug.	1,500	2,881,418	82,223	3,163,204	482,473	319,714	99,850	1,153,181	2,151,872	68.0	1,011,332	373,578	449,773	277,041
	8 mos.	1,500	20,691,601	463,382	22,810,894	3,152,978	2,637,325	759,683	9,348,309	16,652,133	73.0	6,158,761	2,248,990	2,393,620	1,194,509
Chicago, Indianapolis & Louisville	Aug.	541	1,407,013	111,892	1,626,328	324,424	216,167	85,473	630,036	1,355,748	83.4	270,580	93,800	85,424	75,840
	8 mos.	541	10,879,893	764,418	12,443,324	1,960,771	1,648,941	609,904	4,821,987	9,765,284	78.5	2,678,040	805,568	1,044,366	—317,598
Chicago, Milwaukee, St. Paul & Pacific	Aug.	10,671	19,743,135	2,231,078	24,150,594	3,497,974	3,726,670	437,147	9,343,305	17,984,611	74.5	6,165,983	2,738,000	2,721,202	1,324,690
	8 mos.	10,671	133,572,797	14,330,345	163,904,232	25,828,544	29,153,469	3,209,444	72,101,549	137,717,486	84.0	26,186,746	12,153,000	8,353,417	9,642,944
Chicago, Rock Island & Pacific	Aug.	7,644	15,302,534	2,216,740	18,900,404	2,595,846	2,634,117	449,768	6,404,496	12,851,450	68.0	6,048,954	2,402,088	2,539,614	2,532,699
	8 mos.	7,647	106,929,620	15,143,931	131,914,691	15,921,444	19,699,695	3,522,530	51,011,951	95,941,560	72.7	35,973,131	15,001,273	14,557,704	14,377,999
Chicago, St. Paul, Minn. & Omaha	Aug.	1,617	2,695,088	306,146	3,255,885	468,181	428,834	54,255	1,384,004	2,459,102	75.5	796,783	196,017	501,242	187,412
	8 mos.	1,617	18,182,328	1,811,150	21,827,055	3,285,781	3,416,139	448,132	10,708,785	18,802,078	86.1	3,024,977	1,454,536	430,727	541,897
Clinchfield Railroad	Aug.	317	1,683,702	6,391	1,706,187	137,683	298,608	29,752	530,974	1,024,732	60.1	681,455	169,609	614,801	563,096
	8 mos.	317	12,929,619	47,205	13,081,851	1,099,222	2,234,697	254,121	3,985,912	7,812,654	59.7	5,269,197	1,293,968	4,711,443	4,661,505
Colorado & Southern	Aug.	745	1,051,302	109,333	1,265,916	230,056	199,247	22,913	473,099	979,243	77.4	286,673	154,061	106,672	115,313
	8 mos.	745	7,392,576	686,182	8,861,907	1,420,146	1,547,815	188,582	3,767,747	7,321,376	82.6	1,540,531	913,120	421,136	173,366
Ft. Worth & Denver City	Aug.	902	969,802	200,612	1,277,435	206,605	175,920	37,339	500,479	995,683	77.9	281,752	88,115	133,396	398,292
	8 mos.	902	8,628,184	1,142,806	10,567,381	1,592,720	1,411,486	316,687	3,857,618	7,756,630	73.4	2,810,751	996,570	1,374,825	1,543,076

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1948

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax-accruals	Net railway operating income	
						Maintenance of									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1948	1947
Colorado & Wyoming	Aug.	41	169,359	.....	253,519	17,870	23,662	382	84,782	132,857	52.4	120,662	55,843	65,004	49,155
	8 mos.	41	1,102,269	.....	1,781,751	95,284	180,686	8,617	658,042	992,443	55.7	789,308	315,188	471,267	257,327
Columbus & Greenville	Aug.	168	156,787	—7	165,211	50,496	27,458	4,858	58,074	157,489	95.3	7,722	9,344	513	—5,689
	8 mos.	168	1,184,204	4,269	1,267,449	304,003	209,657	39,825	396,894	1,083,518	85.5	183,931	110,524	108,822	—154,427
Delaware & Hudson	Aug.	794	5,079,850	265,445	5,508,968	707,437	1,073,208	66,073	1,986,506	4,005,313	72.7	1,503,655	715,406	833,406	421,787
	8 mos.	794	37,009,786	1,414,253	39,524,708	4,881,522	8,538,530	591,121	15,198,373	30,598,908	77.4	8,925,800	4,444,278	4,676,574	3,917,162
Delaware, Lackawanna & Western	Aug.	973	6,512,339	972,025	8,117,297	1,025,541	1,205,478	140,361	3,253,229	5,853,754	72.1	2,263,543	1,044,156	1,208,492	788,592
	8 mos.	973	48,554,076	7,172,153	60,582,163	7,331,316	9,360,321	1,130,170	26,797,867	46,485,478	76.7	14,096,685	6,726,764	6,821,426	5,406,668
Denver & Rio Grande Western	Aug.	2,443	5,585,265	356,943	6,186,598	929,459	1,020,074	155,925	2,107,365	4,505,113	72.8	1,681,485	655,165	962,316	1,033,328
	8 mos.	2,443	39,355,626	2,053,637	43,223,967	5,344,916	6,893,608	1,114,266	15,443,062	30,836,235	71.3	12,387,732	4,691,687	8,007,050	4,708,667
Detroit & Mackinac	Aug.	230	186,354	2,034	201,208	37,500	26,456	2,041	36,177	110,731	55.0	90,477	36,314	49,521	35,285
	8 mos.	230	1,341,566	9,191	1,442,945	265,000	167,232	12,223	282,168	789,783	54.8	653,162	248,745	389,553	251,751
Detroit & Toledo Shore Line	Aug.	50	550,160	.....	552,839	63,015	53,430	11,478	156,835	295,008	53.4	257,831	66,267	86,569	50,190
	8 mos.	50	4,382,142	.....	4,406,849	380,499	323,679	95,483	1,314,051	2,196,238	49.8	2,210,611	616,529	731,286	610,840
Detroit, Toledo & Ironton	Aug.	464	1,268,953	1,022	1,323,175	144,597	202,815	21,503	321,203	722,808	54.6	600,367	219,961	355,603	205,345
	8 mos.	464	9,747,290	6,548	10,204,914	1,137,135	1,970,434	168,600	2,583,510	6,138,763	60.2	4,066,151	1,554,756	2,187,594	2,046,093
Duluth, Missabe & Iron Range	Aug.	571	5,538,459	4,821	6,512,896	609,317	478,468	6,575	1,436,945	2,596,691	39.9	3,916,205	1,814,563	2,117,542	1,926,212
	8 mos.	570	26,043,776	21,335	30,498,713	4,110,285	3,670,046	57,578	8,182,822	16,510,886	54.1	13,987,827	6,807,078	7,166,537	6,495,664
Duluth, Winnipeg & Pacific	Aug.	175	369,000	2,600	379,200	82,806	46,948	3,477	158,458	297,178	78.4	82,022	29,339	17,571	22,219
	8 mos.	175	2,958,000	12,600	3,008,200	578,288	375,406	27,346	1,227,396	2,253,759	74.9	754,441	239,024	156,682	129,185
Elgin, Joliet & Eastern	Aug.	238	3,243,920	18	3,902,651	327,186	568,283	27,218	1,253,033	2,275,102	58.3	1,627,549	636,308	719,682	454,477
	8 mos.	353	25,185,268	39	30,242,952	2,009,934	4,276,462	211,817	11,101,185	18,384,057	60.8	11,858,895	4,534,626	4,977,036	3,684,588
Erie	Aug.	2,229	13,515,914	787,837	15,423,013	2,014,914	2,270,712	313,467	5,895,856	11,133,236	72.2	4,289,777	1,705,790	2,067,066	942,537
	8 mos.	2,229	102,126,096	5,506,316	115,249,888	13,439,980	18,440,684	2,362,960	47,290,026	86,622,958	75.2	28,626,930	12,704,020	12,185,089	7,023,324
Florida East Coast	Aug.	575	1,151,776	452,779	1,778,725	425,638	421,561	62,984	752,789	1,813,845	102.0	—35,120	127,938	—208,417	—308,988
	8 mos.	575	13,126,577	5,272,150	20,228,895	3,063,846	3,373,582	510,468	8,072,276	16,452,624	81.3	3,776,271	1,119,115	1,775,722	898,765
Georgia Railroad	Aug.	326	671,867	47,736	764,027	91,551	117,034	26,750	362,939	625,488	81.9	138,539	25,521	127,786	52,378
	8 mos.	326	5,157,775	270,215	5,794,690	743,232	838,664	218,066	2,786,034	4,801,668	82.9	993,022	303,496	820,822	428,412
Georgia & Florida	Aug.	408	286,523	2,774	296,152	72,127	34,979	15,607	114,879	246,211	83.1	49,941	15,270	19,604	33,502
	8 mos.	408	1,836,407	15,548	1,899,399	485,764	261,354	102,965	787,447	1,703,613	89.7	195,786	129,021	—53,483	—50,253
Grand Trunk Western	Aug.	972	4,168,000	218,000	4,668,000	649,273	653,153	58,772	1,891,411	3,406,338	73.0	1,261,662	227,280	882,153	425,065
	8 mos.	972	29,643,000	1,450,000	33,290,000	5,199,518	5,755,449	460,626	15,214,251	27,882,314	83.8	5,407,686	1,777,513	2,496,504	2,704,241
Canadian Nat'l Lines in New Engl.	Aug.	172	150,000	19,000	180,000	100,899	44,907	2,770	134,561	288,951	160.5	—108,951	21,648	—166,807	—48,460
	8 mos.	172	1,373,000	82,300	1,557,000	566,295	318,487	21,598	1,026,099	1,998,419	128.4	—441,419	173,175	—884,473	—739,494
Great Northern	Aug.	8,333	18,531,209	1,197,824	21,446,941	3,453,259	2,835,388	313,987	7,195,639	14,478,918	67.5	6,968,023	3,384,909	3,330,791	2,874,777
	8 mos.	8,333	111,898,345	8,330,386	131,045,966	24,942,047	22,000,943	2,525,082	50,826,748	105,124,016	80.2	25,921,950	10,325,598	13,980,703	12,213,823
Green Bay & Western	Aug.	224	327,338	68	332,824	109,470	32,090	17,074	110,775	284,116	85.37	48,708	22,012	6,208	—32,697
	8 mos.	224	2,380,053	288	2,432,838	607,622	254,331	143,379	731,694	1,853,374	76.18	579,464	274,711	170,812	113,890
Gulf, Mobile & Ohio	Aug.	2,905	6,024,114	650,955	7,120,811	1,221,599	1,239,989	225,455	2,106,025	5,105,247	71.7	2,015,564	797,573	892,575	615,789
	8 mos.	2,906	45,309,151	4,322,274	53,202,066	9,159,404	8,921,959	1,778,902	17,107,227	39,527,842	74.3	13,674,218	5,307,104	5,815,504	4,642,511
Illinois Central	Aug.	6,550	17,890,342	2,526,044	22,686,669	4,138,003	3,954,680	465,700	7,881,185	17,396,275	76.7	5,290,394	-2,641,437	2,400,898	2,104,425
	8 mos.	6,569	139,472,526	17,150,447	174,959,907	28,527,659	29,681,841	3,390,837	63,738,032	132,650,440	75.8	42,309,467	21,116,175	18,937,834	17,062,084
Illinois Terminal	Aug.	474	986,365	133,936	1,239,211	192,600	150,804	27,781	419,946	830,866	67.05	408,345	170,218	198,859	172,425
	8 mos.	474	6,831,697	984,103	8,640,699	1,233,068	1,095,424	231,451	3,127,546	5,991,551	69.34	2,649,148	1,134,851	1,274,682	1,122,529
Kansas City Southern	Aug.	890	3,426,617	118,414	3,836,944	332,511	418,279	93,695	1,018,575	1,980,118	51.6	1,856,826	676,000	1,009,987	681,081
	8 mos.	890	24,240,599	787,576	26,990,076	2,177,962	3,139,593	672,733	7,525,777	14,464,846	53.6	12,525,230	4,798,000	6,644,391	4,597,506
Kansas, Oklahoma & Gulf	Aug.	328	506,320	1,258	511,558	48,070	27,922	16,030	135,080	244,769	47.8	266,789	117,629	118,969	58,820
	8 mos.	328	3,704,369	7,660	3,745,024	439,060	300,338	129,584	1,032,199	2,041,450	54.5	1,703,574	723,019	664,895	701,375
Lake Superior & Ishpeming	Aug.	156	397,080	91	499,676	47,073	40,549	1,550	100,863	199,006	39.8	300,670	132,844	173,978	173,265
	8 mos.	156	2,087,265	547	2,613,063	390,749	372,188	12,659	612,370	1,466,615	56.1	1,146,448	582,840	618,294	575,782
Lehigh & Hudson River	Aug.	96	278,896	.....	279,525	51,305	39,553	7,676	96,731	203,254	72.7	76,271	29,866	23,984	6,717
	8 mos.	96	2,252,699	.....	2,260,600	344,241	300,453	63,379	817,171	1,591,734	70.4	668,866	259,947	215,206	162,218
Lehigh & New England	Aug.	193	821,618	.....	823,843	81,898	115,340	10,320	210,928	448,424	54.4	375,419	167,795	224,511	168,309
	8 mos.	193	5,797,420	.....	5,862,388	699,107	839,194	88,666	1,887,305	3,762,542	64.2	2,099,846	963,190	1,228,810	868,807
Lehigh Valley	Aug.	1,252	6,432,691	384,439	7,145,697	943,010	1,122,448	138,763	2,951,295	5,398,366	75.5	1,747,331	454,858	1,209,117	630,008
	8 mos.	1,252	47,151,659	2,833,399	52,671,562	7,246,663	8,333,224	1,110,085	23,937,517	42,642,218	81.0	10,029,344	3,286,065	5,214,134	3,566,372
Louisiana & Arkansas	Aug.	756	1,710,564	70,574	1,846,426	218,956	165,883	50,450	565,886	1,052,213	57.0	794,213	290,582	351,482	218,904
	8 mos.	756	12,425,112	461,261	13,387,731	1,428,271	1,210,210	360,699	4,272,797	7,652,085	57.2	5,735,646	2,312,252	2,391,296	1,561,624

Table continued on next left-hand page.

there is a place . . .

We firmly believe that for a long, long time, there will continue to be a demand for steam locomotives.

Therefore, while we *are* building diesel-electrics for the switching field—and while we *have* the highest hopes for the free-piston gas generator turbine which we are now testing for locomotive use—we will continue to build a complete line of steam locomotives.

We will continue to explore all possible ways of improving such locomotives. We will continue to build them with the traditional fineness of design and manufacture that is responsible for Lima's world-wide reputation. And we will continue to believe that there is a place for these locomotives —for such modern power as the 2-6-6-6's we are now building, as our fifth order for the C&O.

LIMA HAMILTON CORPORATION

DIVISIONS: *Lima, Ohio* — Lima Locomotive Works Division; Lima Shovel and Crane Division. *Hamilton, Ohio* — Hooven, Owens, Rentschler Co.; Niles Tool Works Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1948

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating Expenses: Maintenance of: Way and structures	Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax-accruals	Net railway operating income: 1948	1947
Louisville & Nashville	Aug.	4,759	15,774,303	1,570,340	18,344,470	2,612,171	3,811,744	281,334	7,180,120	14,509,471	79.1	3,834,999	2,359,224	2,384,225	1,270,066
	8 mos.	4,759	119,217,877	10,681,652	137,841,993	19,554,543	28,775,617	2,348,385	58,480,865	114,019,085	82.7	23,822,908	16,496,770	12,944,726	10,940,204
Maine Central	Aug.	988	1,767,613	269,618	2,189,287	454,785	417,220	19,176	792,632	1,749,213	79.9	440,074	227,762	195,362	167,024
	8 mos.	988	15,315,378	1,483,450	17,920,362	3,320,922	3,235,540	141,730	6,750,843	13,979,115	78.0	3,941,247	1,780,703	1,772,245	1,422,214
Midland Valley	Aug.	334	155,202	23	159,613	42,154	25,053	3,157	53,388	129,938	81.4	29,675	13,958	7,284	13,532
	8 mos.	334	1,325,335	126	1,358,639	314,126	158,443	24,087	445,092	997,822	73.4	360,817	169,532	130,032	168,646
Minneapolis & St. Louis	Aug.	1,401	1,803,043	13,982	1,874,312	354,345	269,390	94,400	564,277	1,371,071	73.2	503,241	227,190	257,362	130,566
	8 mos.	1,405	12,383,316	73,197	12,882,431	2,376,797	2,138,315	800,644	4,404,561	10,406,580	80.8	2,475,851	1,356,092	1,069,560	1,179,555
Minneapolis, St. Paul & S. S. Marie	Aug.	3,225	3,177,605	172,553	3,566,759	610,493	591,530	64,779	1,297,204	2,678,165	75.1	888,594	232,353	591,438	68,464
	8 mos.	3,225	19,454,894	872,906	21,737,778	4,670,096	4,172,865	477,984	9,648,774	19,807,046	91.1	1,930,732	1,608,957	218,341	443,572
Duluth, South Shore & Atlantic	Aug.	530	525,599	14,369	571,115	152,359	88,194	17,824	198,539	467,536	81.9	103,579	24,773	49,659	85,518
	8 mos.	530	3,931,024	83,551	4,228,014	860,116	723,726	130,558	1,652,792	3,449,692	81.6	778,322	191,050	444,170	380,890
Spokane International	Aug.	152	213,017	1,294	226,985	54,454	15,626	3,996	68,116	151,663	66.8	75,322	35,754	26,687	12,855
	8 mos.	152	1,262,114	11,960	1,367,359	313,215	157,732	30,653	484,907	1,059,813	77.5	307,546	108,113	100,797	105,132
Mississippi Central	Aug.	148	221,190	231	225,444	38,325	19,848	11,942	50,421	128,265	56.9	97,179	46,941	32,230	9,704
	8 mos.	148	1,474,357	3,159	1,510,651	311,145	144,607	94,174	361,778	979,216	64.8	531,435	189,647	207,267	102,064
Missouri & Arkansas	Aug.			Not in operation											
	8 mos.			Not in operation											
Missouri-Illinois	Aug.	172	350,989	391	353,004	83,094	44,105	6,230	102,715	244,311	69.2	108,693	53,096	47,751	42,759
	8 mos.	172	3,031,976	2,742	3,055,269	512,300	328,400	51,576	797,780	1,754,456	57.4	1,300,813	549,715	663,281	507,742
Missouri-Kansas-Texas Lines	Aug.	3,253	6,719,396	414,788	7,667,462	999,014	976,344	208,753	2,865,448	5,311,040	69.3	2,356,422	914,435	1,007,857	736,809
	8 mos.	3,253	45,656,997	2,981,635	52,839,302	7,082,698	7,108,357	1,710,687	21,115,404	39,196,679	74.2	13,642,623	5,212,446	5,629,189	3,752,477
Missouri Pacific	Aug.	7,012	17,316,585	1,394,152	20,136,950	2,978,180	2,831,783	400,318	7,077,240	13,911,739	69.1	6,225,211	2,283,767	3,253,870	2,335,444
	8 mos.	7,012	123,621,138	9,440,785	144,751,535	21,233,375	22,525,612	3,126,965	57,660,794	109,508,937	75.7	35,242,598	11,410,438	17,546,240	14,879,098
Gulf Coast Lines	Aug.	1,719	3,098,041	103,378	3,369,174	661,075	431,160	78,988	1,216,851	2,510,271	74.5	858,902	265,601	410,745	335,375
	8 mos.	1,724	30,385,091	732,441	32,364,972	6,248,745	3,436,345	615,410	10,307,429	21,554,344	66.6	10,810,627	2,942,330	5,541,720	4,434,331
International-Gt. Northern	Aug.	1,110	2,539,195	218,474	2,988,556	473,307	403,880	49,989	1,250,022	2,302,108	77.0	686,448	109,437	408,447	233,724
	8 mos.	1,110	18,720,659	1,572,459	22,254,060	3,774,767	3,308,326	399,327	10,192,547	18,654,076	83.8	3,599,984	903,737	1,385,875	719,629
Monongahela	Aug.	170	782,666	1,479	793,422	88,146	68,965	1,036	245,462	408,883	51.5	384,539	92,093	167,187	135,522
	8 mos.	170	5,424,003	9,523	5,479,472	614,012	507,322	12,361	1,696,417	2,871,579	52.4	2,607,893	737,489	942,953	1,264,012
Montour	Aug.	51	317,593	.....	318,997	32,000	84,178	732	89,034	212,956	66.8	106,041	76,533	83,539	70,952
	8 mos.	51	1,946,884	.....	1,954,678	180,851	556,649	5,904	620,811	1,440,822	73.7	513,856	451,689	540,039	516,255
Nashville, Chattanooga & St. Louis	Aug.	1,051	2,559,558	206,187	3,004,449	457,341	570,782	109,999	1,395,716	2,640,582	87.9	363,867	114,715	265,158	25,539
	8 mos.	1,051	19,951,119	1,604,238	23,614,721	3,625,625	4,334,164	836,722	9,738,563	19,465,833	82.4	4,148,888	2,278,867	1,825,453	1,235,465
New York Central	Aug.	10,745	49,755,299	12,349,905	69,030,415	10,880,060	13,119,690	1,000,775	28,827,619	56,793,947	82.3	12,236,468	4,658,463	5,935,253	2,828,715
	8 mos.	10,745	366,105,514	87,060,381	505,122,987	70,184,559	102,351,993	8,061,368	226,983,108	431,249,025	85.4	73,873,962	35,739,008	23,473,693	20,622,918
Pittsburgh & Lake Erie	Aug.	223	3,918,159	104,286	4,175,272	496,485	923,769	65,486	1,443,437	3,091,136	74.0	1,084,136	665,572	957,622	703,928
	8 mos.	223	27,504,730	792,138	29,440,033	3,584,941	7,366,716	503,946	10,387,602	23,152,518	78.6	6,287,515	4,950,547	6,583,333	4,678,903
New York, Chicago & St. Louis	Aug.	1,686	8,766,136	152,090	9,106,225	1,183,669	1,364,288	216,706	3,109,190	6,182,182	67.9	2,924,043	1,101,733	1,408,170	921,802
	8 mos.	1,686	69,418,228	1,035,216	72,035,061	9,164,421	10,919,152	1,686,194	25,365,640	49,528,817	68.8	22,506,244	8,522,167	10,598,501	6,385,625
New York, New Haven & Hartford	Aug.	1,801	8,113,371	5,067,961	14,639,189	2,059,341	2,029,346	229,342	5,853,331	11,058,713	75.5	3,580,476	1,346,000	1,371,110	944,923
	8 mos.	1,829	64,638,210	38,057,082	113,809,438	16,769,820	15,617,102	1,965,479	48,516,083	90,178,446	79.2	23,630,992	8,721,000	6,929,883	3,980,252
New York Connecting	Aug.	21	233,112	.....	256,419	78,024	14,526	.....	56,565	151,560	59.1	104,859	61,502	93,672	44,472
	8 mos.	21	1,825,418	.....	2,006,388	549,013	156,606	.....	567,420	1,293,485	64.5	712,903	503,089	470,230	304,176
New York, Ontario & Western	Aug.	544	610,207	50,161	714,364	117,317	100,396	28,860	325,969	603,392	84.5	110,972	40,994	—7,462	—126,951
	8 mos.	544	4,773,684	132,775	5,306,261	939,363	892,362	239,968	2,811,355	5,131,796	96.7	174,465	333,877	—852,354	—713,887
New York, Susquehanna & Western	Aug.	120	338,397	42,205	400,653	43,517	54,056	5,448	169,513	294,268	73.4	106,385	28,110	44,318	—3,170
	8 mos.	120	2,877,520	347,783	3,361,195	376,076	372,701	44,780	1,438,459	2,434,371	72.4	926,824	272,365	236,380	166,728
Norfolk & Western	Aug.	2,129	15,860,698	590,199	17,044,625	2,077,812	2,830,458	255,172	5,071,870	10,752,217	63.1	6,292,408	3,252,628	4,097,857	3,514,714
	8 mos.	2,129	112,789,841	4,021,767	121,372,810	15,191,821	22,300,186	2,073,730	38,172,026	81,874,094	67.5	39,498,716	22,404,003	25,442,111	22,538,581
Norfolk Southern	Aug.	726	863,509	.....	892,049	170,803	88,475	39,696	284,373	637,307	71.4	254,742	136,928	94,164	—29,364
	8 mos.	726	6,514,083	1,094	6,711 745	1,325,684	684,577	308,615	2,328,085	5,054,829	75.3	1,656,916	829,584	633,733	200,158
Northern Pacific	Aug.	6,889	13,268,190	752,780	15,165,695	2,287,175	2,328,217	252,376	5,215,588	10,776,043	71.1	4,389,652	2,092,394	2,400,418	1,455,767
	8 mos.	6,904	84,840,708	4,742,522	97,708,651	17,207,707	18,899,404	2,004,597	36,508,797	79,592,311	81.5	18,116,340	10,263,891	10,184,286	10,244,750
Northwestern Pacific	Aug.	331	889,541	8,822	934,821	161,529	91,269	3,256	418,019	695,289	74.4	239,532	36,629	139,286	65,922
	8 mos.	331	5,406,500	72,099	5,679,570	1,264,196	662,982	33,531	2,585,007	4,667,759	82.2	1,011,811	280,547	375,153	431,720
Oklahoma City-Ada-Atoka	Aug.	132	98,941	.....	100,466	20,893	4,307	1,237	21,117	50,809	50.6	49,657	19,490	17,920	3,225
	8 mos.	132	689,788	2	703,279	166,536	34,097	10,087	179,939	414,621	59.0	288,658	111,992	88,940	43,788
Pennsylvania	Aug.	10,108	67,708,196	14,603,913	90,056,320	10,698,991	17,835,985	1,277,927	37,559,223	70,424,102	78.2	19,632,218	8,023,201	10,606,605	6,892,605
	8 mos.	10,108	491,659,108	105,126,849	653,609,628	77,443,451	141,048,549	9,952,332	299,972,356	553,331,109	84.7	100,278,519	55,658,713	35,832,083	23,085,444
Long Island	Aug.	376	1,573,003	3,708,636	5,499,636	687,792	850,630	47,714	2,419,127	4,094,934	74.5	1,404,702	450,927	658,509	565,767
	8 mos.	376	10,384,146	22,575,752	34,718,750	5,455,255	6,193,003	206,457	18,416,078	31,008,400	89.3	3,710,350	3,621,640	—2,423,763	—954,257

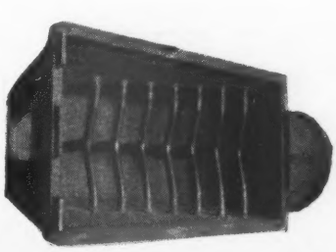
Table continued on next left-hand page.

THERE ARE IMPORTANT *PLUS* ADVANTAGES

ORIGINALLY developed to support a 100% brick arch in the locomotive firebox, actual road experience has shown that Security Circulators, installed in new or existing motive power, yield important plus advantages.

Adding an effective evaporating surface right in the path of the hot gases, Security Circulators enable the locomotive to get up steam more rapidly. Quickening the circulation of water from the side water-legs to the crown sheet, Security Circulators aid in maintaining maximum boiler output.

Definitely lessening honeycombing, flue plugging and cinder cutting, Security Circulators increase locomotive availability and reduce boiler maintenance.



SECURITY CIRCULATOR DIVISION

AMERICAN ARCH COMPANY INC.

NEW YORK • CHICAGO

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1948

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating Expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax-accruals	Net railway operating income 1948	1947
Pennsylvania-Reading Seashore Lines	Aug.	388	601,307	871,017	1,527,823	207,243	109,226	16,276	767,120	1,128,319	73.9	399,504	98,572	125,096	311,177
	8 mos.	388	4,512,784	3,223,234	8,058,301	1,664,632	958,976	89,082	5,031,333	7,980,037	99.0	78,264	773,839	—1,812,225	—1,096,027
Pittsburg & Shawmut	Aug.	97	302,176	.....	303,106	72,328	42,742	2,669	82,469	213,263	70.3	89,903	33,801	35,297	53,507
	8 mos.	97	2,136,250	.....	2,143,407	394,339	323,890	25,805	584,427	1,402,501	65.4	740,906	272,407	353,741	437,123
Pittsburgh & West Virginia	Aug.	135	786,742	.....	822,970	139,542	131,379	37,895	178,827	518,952	63.1	304,018	129,880	185,371	116,433
	8 mos.	135	5,499,916	5	5,726,063	811,690	998,148	309,120	1,370,438	3,751,748	65.5	1,974,315	887,503	1,289,631	794,253
Pittsburg, Shawmut & Northern	Aug.	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	8 mos.	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Reading	Aug.	1,338	10,005,692	667,075	11,234,014	1,898,241	2,106,538	123,613	4,152,802	8,590,584	76.5	2,643,430	1,259,033	1,348,862	1,017,120
	8 mos.	1,346	75,050,381	5,301,945	84,611,306	13,728,135	16,021,953	1,019,320	33,325,247	66,509,234	78.6	18,102,072	8,658,534	9,015,403	8,211,932
Richmond, Fredericksburg & Potomac	Aug.	118	1,250,604	573,080	2,029,951	266,997	332,104	18,844	800,499	1,531,556	75.4	498,395	238,107	210,411	213,128
	8 mos.	118	11,146,897	4,763,206	17,914,376	2,204,616	2,554,787	151,420	7,123,135	13,068,742	73.0	4,845,634	2,144,373	1,965,980	1,912,512
Rutland	Aug.	407	434,642	57,093	579,510	77,759	90,908	15,451	281,374	482,777	83.3	96,733	31,853	52,755	—18,638
	8 mos.	407	3,247,345	300,974	4,182,762	566,872	751,850	109,066	2,190,485	3,761,729	89.9	421,033	239,179	45,096	—523,797
St. Louis-San Francisco	Aug.	4,645	8,000,406	703,270	9,409,628	1,444,921	1,559,962	240,280	3,748,069	7,417,893	78.8	1,991,735	1,025,793	1,087,021	922,829
	8 mos.	4,645	62,843,804	5,007,113	73,418,293	11,218,990	12,038,137	1,943,992	31,682,994	60,168,902	82.0	13,249,391	7,109,871	6,779,926	6,285,136
St. Louis, San Francisco & Texas	Aug.	159	402,306	11,259	431,848	57,263	31,469	14,522	169,085	282,962	65.5	148,886	49,980	67,512	30,551
	8 mos.	159	2,978,292	108,264	3,243,918	401,300	285,643	127,144	1,427,046	2,323,586	71.6	920,322	312,186	374,770	208,563
St. Louis South Western Lines	Aug.	1,575	4,756,361	91,310	5,027,459	664,829	616,753	131,969	1,621,378	3,203,076	63.7	1,824,383	838,202	791,237	932,790
	8 mos.	1,575	39,416,445	538,340	41,279,820	4,425,877	4,966,185	1,066,877	13,641,177	25,455,993	61.7	15,823,827	6,459,123	7,548,645	7,094,983
Seaboard Air Line	Aug.	4,152	8,172,528	1,253,682	10,148,070	1,454,122	1,999,015	312,651	3,790,022	8,040,372	79.2	2,107,698	986,419	1,046,014	433,854
	8 mos.	4,152	72,499,284	11,182,579	89,887,825	13,591,793	15,596,278	2,432,488	34,259,142	69,999,336	77.9	19,888,489	8,446,504	9,476,800	6,400,937
Southern Railway	Aug.	6,483	18,030,360	2,110,401	21,517,379	2,832,311	3,795,983	323,503	8,016,213	15,779,141	73.3	5,738,238	2,708,030	2,838,599	1,588,927
	8 mos.	6,483	137,766,199	14,081,123	162,696,333	22,012,730	28,855,525	2,795,636	62,421,536	122,275,617	75.2	40,420,716	18,502,261	19,219,949	13,505,837
Alabama Great Southern	Aug.	316	1,317,693	172,973	1,564,084	210,413	283,360	36,695	560,247	1,146,184	73.3	417,900	233,593	217,976	158,825
	8 mos.	316	10,420,148	976,390	12,091,909	1,595,017	2,467,182	243,723	4,121,165	8,833,724	73.1	3,258,185	1,894,175	1,718,228	1,040,089
Cinn., New Orleans & Texas Pacific	Aug.	337	2,972,573	243,884	3,363,164	402,042	656,349	60,042	989,283	2,213,074	65.8	1,150,090	602,627	702,289	461,252
	8 mos.	337	23,715,814	1,690,537	26,616,572	3,157,864	4,968,608	457,098	7,910,021	17,292,049	65.0	9,324,523	4,732,125	5,530,810	3,942,508
Georgia Southern & Florida	Aug.	397	480,894	31,935	561,837	143,511	81,774	7,900	313,806	461,241	82.1	100,596	30,344	138	—29,521
	8 mos.	397	3,863,430	564,840	4,850,340	1,020,824	599,308	63,107	1,797,351	3,617,389	74.6	1,232,951	356,802	323,396	251,894
New Orleans & Northeastern	Aug.	204	1,030,686	85,550	1,170,463	139 629	127,652	21,727	282,767	611,892	52.3	558,571	246,886	255,960	114,336
	8 mos.	204	7,456,820	542,501	8,425,743	1,160,509	883,684	148,780	2,078,328	4,560,168	54.1	3,865,575	1,676,865	1,760,033	1,150,653
Southern Pacific	Aug.	8,179	33,213,402	4,904,033	41,123,752	4,358,296	7,559,058	689,375	17,133,697	31,996,753	77.8	9,126,999	3,726,819	3,633,136	3,162,174
	8 mos.	8,188	247,374,417	32,754,876	301,390,736	34,446,387	56,054,454	5,501,103	123,923,064	236,153,753	78.4	65,236,983	29,751,501	25,340,085	21,333,638
Texas & New Orleans	Aug.	4,316	9,107,958	991,376	10,825,243	1,347,012	1,437,757	203,554	4,265,281	7,708,746	71.2	3,116,497	1,229,492	1,302,665	1,248,064
	8 mos.	4,316	72,347,555	6,779,467	84,551,639	10,919,466	11,707,428	1,609,604	33,744,341	61,670,708	72.9	22,880,931	9,023,068	9,530,344	9,710,461
Spokane, Portland & Seattle	Aug.	945	2,355,871	115,312	2,572,406	431,231	202,398	18,866	854,287	1,599,229	62.2	973,177	156,407	541,611	137,749
	8 mos.	945	14,882,026	772,518	16,650,717	3,678,198	1,820,467	151,564	6,015,200	12,376,077	74.3	4,274,640	1,227,574	1,800,708	911,440
Tennessee Central	Aug.	286	394,132	5,045	422,871	62,538	61,933	8,798	181,773	331,306	78.3	91,565	9,606	56.256	—14,715
	8 mos.	286	2,918,330	68,089	3,160,593	494,517	536,402	69,898	1,434,142	2,667,763	84.4	492,830	178,998	55,455	—107,061
Texas & Pacific	Aug.	1,854	5,610,557	550,743	6,597,937	775,955	950,740	157,190	2,479,181	4,648,842	70.5	1,949,095	758,350	811,984	617,402
	8 mos.	1,854	44,045,668	3,994,740	51,660,252	6,511,409	7,742,040	1,276,868	20,566,730	38,391,382	74.3	13,268,870	4,988,451	5,526,965	4,886,592
Texas Mexican	Aug.	162	232,000	.. ..	268,770	67,552	43,392	5,664	62,456	193,011	71.8	75,759	41,848	3,182	53,998
	8 mos.	162	1,902,194	66	2,154,572	339,221	225,179	45,713	527,210	1,299,398	60.3	855,174	388,325	311,479	434,701
Toledo, Peoria & Western	Aug.	239	399,752	Dr. 1	407,457	142,306	21,767	33,295	101,208	318,964	78.3	88,493	33,622	34,022	—21,031
	8 mos.	239	2,855,961	Dr. 22	2,907,948	539,812	188,496	264,598	772,967	2,018,766	69.4	889,182	341,566	380,443	—362,010
Union Pacific System	Aug.	9,751	33,125,233	4,343,242	40,775,925	4,470,079	6,195,535	690,694	13,623,122	27,067,668	66.4	13,708,257	6,381,112	5,758,608	3,984,194
	8 mos.	9,752	226,856,790	29,158,930	279,018,510	40,405,764	45,964,481	6,277,500	99,117,454	208,028,085	74.6	70,990,425	38,630,842	24,020,090	21,917,656
Utah	Aug.	111	109,530	.....	110,705	24,294	49,979	609	46,180	128,749	116.3	—18,044	11,699	—29,099	—8,214
	8 mos.	111	1,112,527	.....	1,115,942	251,618	372,252	5,116	454,404	1,146,949	102.8	—31,007	98,993	—69,513	42,212
Virginian	Aug.	661	3,565,267	7,428	3,660,615	399,607	609,260	38,852	871,475	2,003,773	54.7	1,656,842	804,000	1,096,479	954,552
	8 mos.	661	23,900,234	44,128	24,656,920	3,022,960	5,417,647	308,799	6,413,350	15,871,610	64.4	8,785,310	4,533,860	5,731,788	6,075,409
Wabash	Aug.	2,393	7,990,047	511,227	9,079,477	1,332,009	1,172,359	254,341	3,528,907	6,627,434	73.0	2,452,043	935,982	1,046,407	738,831
	8 mos.	2,393	61,607,112	3,696,983	69,929,846	9,689,475	9,330,971	2,005,503	27,312,166	50,938,988	72.8	18,990,858	7,359,321	8,201,050	6,548,791
Ann Arbor	Aug.	294	827,910	6,981	885,055	114,473	140,816	23,308	308,523	607,551	68.6	277,504	115,787	145,493	86,866
	8 mos.	294	5,715,885	31,615	5,941,052	703,778	1,177,442	178,351	2,400,883	4,589,806	77.3	1,351,246	587,400	633,471	401,636
Western Maryland	Aug.	837	4,137,021	20,251	4,310,129	586,965	721,133	64,261	1,220,370	2,725,071	63.2	1,585,058	732,000	1,022,913	696,392
	8 mos.	837	28,326,058	112,494	29,382,076	3,783,878	5,622,942	526,026	9,509,020	20,430,272	69.5	8,951,804	4,108,000	5,814,661	5,010,573
Western Pacific	Aug.	1,195	3,666,778	239,494	4,043,625	565,939	604,863	138,162	1,295,682	2,809,518	69.5	1,234,107	515,559	592,440	586,006
	8 mos.	1,195	25,613,564	1,336,238	27,765,198	4,077,412	4,787.710	1,056,915	10,068,914	21,557,508	77.6	6,207,690	2,463,876	3,209,835	2,001,371
Wheeling & Lake Erie	Aug.	505	3,386,889	.....	3,538,232	433,023	437,613	57,788	986,259	1,988,629	56.2	1,549,603	732,896	964,830	574,671
	8 mos.	505	22,950,958	16	24,074,253	3,157,031	3,452,566	485,963	7,217,330	14,987,474	61.9	9,176,779	4,792,184	5,897,945	4,354,673
Wisconsin Central	Aug.	1,051	2,393,522	73,237	2,583,604	358,765	408,474	61,047	1,048,446	1,964,114	76.0	619,490	235,995	238,192	336,595
	8 mos.	1,051	18,131,035	387,057	19,737,339	2,532,562	2,903,360	456,293	7,930,320	14,477,502	73.4	5,259,837	1,779,153	2,429,132	2,549,670

HSGI *Tension Cast* Valve Snap Rings

HUNT-SPILLER (HSGI) Individually Cast Valve Snap Rings have true rotundity, in contrast to tub-cast rings which are forced out-of-round when the gaps are closed. Thus, with their cast-in tension, they exert equal pressure at every point. No "spotty" wear on rings or bushing wall. Finally, because they are individually cast, HSGI Valve Snap Rings have greater hardness and finer structure on all sides—top, bottom, inner, and outer surfaces. That too means longer wear.

HSGI *Tension-Cast* Valve Snap Rings are supplied finished and ready to apply. They can be made promptly upon receipt of any order. Hunt-Spiller Mfg. Corporation, 383 Dorchester Ave., Boston 27, Mass. In Canada: Jos. Robb & Co., Ltd., 4050 Namur St., Montreal 16, P.Q. Export Agents: International Ry. Supply Co., 30 Church St., New York 7, N. Y.

Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller *Air-Furnace* Gun Iron.

HUNT-SPILLER MFG. CORPORATION

N. C. RAYMOND, *President* E. J. FULLER, *V. P. & Gen. Mgr.*

383 DORCHESTER AVE., BOSTON 27, MASS.

Canadian Licensed Manufacturer, Joseph Robb & Co. Ltd., 4050 Namur St., Montreal 16, P. Q.

Cylinder Bushings	Valve Bull Rings	Dunbar Sectional Type Packing	Light Weight Valves
Cylinder Packing Rings	Crosshead Shoes	Duplex Sectional Type Packing	Cylinder Liners and Pistons
Pistons or Piston Bull Rings	Hub Liners	for Cylinders and Valves	for Diesel Service
Valve Bushings	Shoes and Wedges	(Duplex Springs for Above	Cylinder Snap Rings
Valve Packing Rings	Floating Rod Bushings	Sectional Packing)	Valve Rings, All Shapes

General News

(*Continued from page 60*)

Move to Bring A.R.M.E.A. Under A.A.R.

The American Railway Magazine Editors' Association held its annual meeting at Pinehurst, N. C., on October 17-19, with 24 of the association's member publications represented in person or by proxy. Chairman George Frank (Erie) of the by-laws committee proposed changes in the association's by-laws which, if accepted by the membership and by the directorate of the Association of American Railroads, would have the effect of converting the A.R.M.E.A. into a division or section of the A.A.R. A motion was carried that this proposal be studied by a sub-committee of the A.R.M.E.A. executive committee, and referred either to a letter ballot of A.R.M.E.A. members or to a special membership meeting to be called not later than next spring, as the executive committee may decide.

Vice-President R. S. Henry of the A.A.R. addresed the meeting, noting the importance of employee magazines to the attainment of improved understanding of railroad operations and accomplishments, and sought the suggestions of the members as to how the public relations department of the A.A.R. could cooperate more effectively with the company magazines. J. G. Lyne, co-editor of *Railway Age*, spoke on "Means of Developing an Editorial Policy for Education in the Principles of Free Enterprise."

It was reported that the attractive pamphlet containing abstracts of addresses to A.R.M.E.A.'s 1947 convention —which was issued under the title of "Bridge Builders to Understanding"— had received widespread distribution. Requests for more than 400 copies have come in from top executives of many large concerns outside the railroad industry, and their comment indicates that this pamphlet has reflected extensive and valuable credit with the influential public on the railroad industry for its activity and interest in establishing improved employee relations. In all, some 3,500 copies of this pamphlet have been circulated and a limited supply is available for further distribution.

George W. Eastland (C. & N. W.), chairman of the committee which polled the membership to take their votes on outstanding performance by member papers, presented certificates of award as follows: *Best Writing*: (1) C. & O.; (2) D. & R. G. W.; (3) L. & N.—*Best Railroad Story*: (1) I. C.; (2) C. & O.; (3) L. & N.—*Best Makeup*: (1) N. & W.; (2) L. & N.; (3) Southern—*Best Human-Interest Story*: (1) B. & O.; (2) Milw.; (3) C. & O.—*Best Illustration*: (1) N. & W.; (2) Southern; (3) L. & N.—*Best Cover Page*: (1) Southern; (2) N. & W.; (3) L. & N.—*Best Coverage of Company and Industry Policy*: (1) Southern; (2) C. & N. W.; (3) High Point, Thomasville & Denton—*Best External Circulation*: (1) C. & O.; (2) G. N.; (3) L. & N.—*Best Printing Other Than Letterpress*: (1) C. B. & Q.; (2) Monon; (3) K. & I. T.

Progress and plans regarding the A. R. M. E. A.'s prize essay contest among railroad employees were extensively discussed.

Officers for the coming year were elected as follows: President, George W. Eastland (C. & N. W.); first vice-president, Jack R. Maguire (M-K-T); second vice-president, Clifford G. Massoth (I. C.); secretary, Hugh L. Fitts (M. P.); treasurer, Robert H. Klank (C. & N. W); executive committee, the officers and Walter C. Mittelberg (W. P.), Virginia Tanner (B. & O.), Chris D. Hobson (T. & P.), and Hal T. Freed (N. & W.).

The outgoing president, Walter C. Mittelberg, presided at the meeting, and imaginative and hospitable local arrangements were made by Eugene E. Humble (High Point, Thomasville & Denton).

New I.C.C. Accounts Proposed

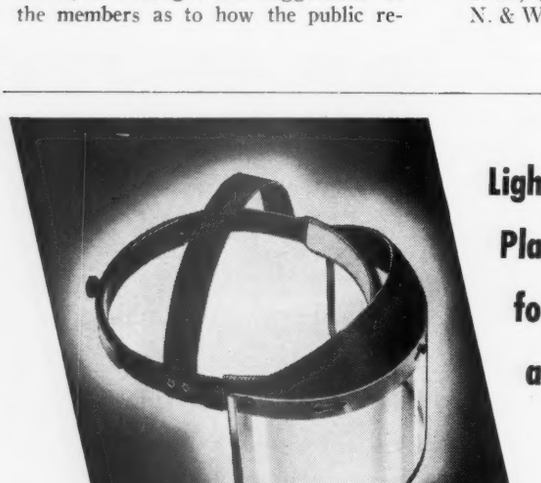
The Interstate Commerce Commission has issued two statements embodying modifications to its "Uniform System of Accounts for Persons Furnishing Cars or Protective Services Against Heat or Cold." The modifications will become effective January 1, 1949; meanwhile, the commission has invited any interested party to file with it on or before November 18 a written statement of reasons why the proposed changes should not become effective and to request oral argument thereon.

Canadian Cabinet Refers Rate Protest Back to Transport Board

The Canadian Cabinet, whose committee last month heard the appeal of seven provinces against the Transport Board's award of a 21 per cent railroad freight rate increase, (see *Railway Age* of October 9, page 79) has tossed the complaints made by the provinces back to the board.

That is the effect of the Cabinet decision although it also expresses its "opinion" that "some portion of the corporate needs of the Canadian Pacific should be borne by income from non-railway operations."

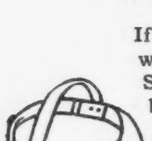
Short of ordering a suspension of the rate increase, the government to a large extent met the demands of the provinces about the formula used by the Transport Board in computing the boost. In their petition to the Cabinet, the seven provinces which have fought for nearly two years against any rate increase listed 10 objections to the board's decision of last March.



Style VI-64

Lightweight, Comfortable Plastic Protection for Face, Head and Eyes

If you want the fellows doing light grinding, wood working, spot welding to wear eye protection, give them WILLSON Protecto-Shields*. The large, one-piece visor—4", 6" or 8" long—provides both front and side protection. The adjustable, padded headband provides a snug comfortable fit. Workers wear them for long periods without fatigue. There's plenty of room for prescription glasses—and the visor swings up off the face when not in use.



V1 Headgear small browguard

V3 Headgear large browguard

For complete information on these products and their application, as well as many more eye and respiratory protective devices, get in touch with your nearest WILLSON distributor or write us direct.

*T. M. Reg. U. S. Pat. Off.

WILLSON*

WILLSON PRODUCTS, INC., 241 WASHINGTON STREET • READING, PA.

The Cabinet decision says, in effect, "We are inclined to agree with many of the provinces' objections, and are referring the subject matter of the petition back to the Transport Board so that when, early in January, it opens hearings on the new application of the railways for an additional interim boost of 15 per cent and a permanent increase of 20 per cent those objections will be given special attention."

Equipment on Order

Class I railroads and private car lines had 108,996 new freight cars on order on October 1, compared with 115,996 on order October 1, 1947, according to the Association of American Railroads. Of the former total, Class I roads and railroad-owned private-controlled refrigerator car companies had 99,905 new freight cars on order, as compared with 104,451 on order on October 1, 1947.

Cars on order by Class I roads and railroad-owned private-controlled refrigerator car companies on October 1 included 21,647 box cars, of which 21,495 were plain and ventilated and 152 automobile box cars; 47,844 hopper cars, including 3,708 covered hoppers; 17,835 gondolas; 4,053 flat; 7,068 refrigerator; 549 stock and 909 miscellaneous freight cars. Of the total number of new freight cars which Class I roads had on order on October 1, 33,605 will be built in railroad shops and 66,300 in outside shops.

The Class I roads also had 1,578 locomotives on order on October 1, compared with 841 on order on October 1, 1947. The 1948 total included 101 steam and 1,477 Diesel-electric locomotives, compared with 46 steam, four electric and 791 Diesel-electrics on October 1, 1947.

Class I roads and railroad-owned private-controlled refrigerator car companies put 77,848 new freight cars in service in the first nine months of 1948, compared with 38,572 in the same 1947 period. Of the former total, 8,765 were installed by the railroads. In September, 1947, 7,182 new cars were put in service.

Those installed so far this year include 32,584 box cars of which 31,322 were plain and ventilated and 1,262 automobile box cars; 31,749 hopper cars, including 1,547 covered hoppers; 7,763 gondolas; 5,073 refrigerator; 49 flat; 301 stock and 329 miscellaneous freight cars.

The Class I roads also put 1,012 new locomotives in service in the first nine months of 1948, of which 56 were steam, four electric and 952 Diesel-electric. New locomotives installed in the same period last year totaled 595, of which 67 were steam, two electric and 526 Diesel-electric.

The Class I roads and affiliated refrigerator car companies retired 58,987 freight cars in the first nine months of 1948, of which number 6,216 were retired in September. In the same 1947 period, 48,357 cars were retired.

. . . you'll get it best via Graybar

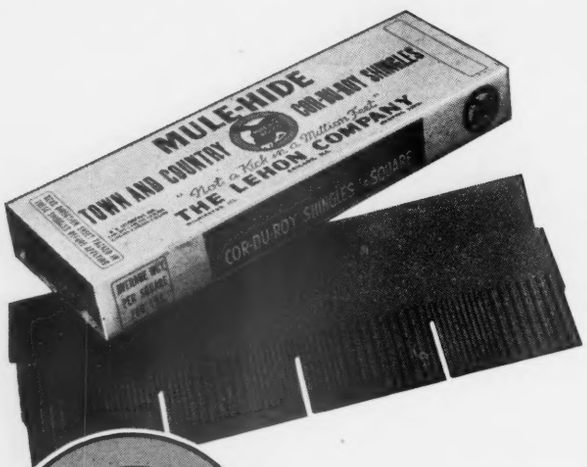
You'll get first-quality apparatus, because Graybar distributes Webster Teletalk "intercom" systems, Edwards code-calling and alarm systems, and all types of electric bells, horns, and buzzers.

You'll get the right apparatus for big jobs or little — for shop, yard, office, warehouse, or station — because Graybar Signaling Specialists know this whole field thoroughly, and Graybar's Railroad Department is familiar with your kinds of requirements specifically.

You'll get prompt, friendly attention, too. That goes for *any* order you place with us — for signaling, lighting, wiring, ventilating, or electric power apparatus or tools. Stocks of many items are maintained at a near-by Graybar warehouse, manned by personnel who own a share of the business and who thus are especially interested in serving you well. *Graybar Electric Company, Inc. Executive offices: Graybar Building, New York 17, N. Y.* 4863

OFFICES AND WAREHOUSES IN OVER 100 PRINCIPAL CITIES

"TOPS" for Railway Buildings



MULE-HIDE *Town and Country Shingles* are "Tops" for Railway Buildings because:

MULE-HIDE ROOFS
TOWN & COUNTRY SHINGLES

1. They improve the appearance of your buildings.
2. They are thicker, heavier, (triple thickness over 94.6% of the roof); have 42.7% *less weather exposure;* nails are placed closer to Butts—assuring *greater protection and longer life.*

For long-term economy, specify **MULE-HIDE** *Town and Country* heavy-duty Shingles. May we send you more information?

MULE-HIDE ROOFS "NOT A KICK IN A MILLION FEET"

MULE-HIDE

2882

THE LEHON COMPANY 4425 SOUTH OAKLEY, CHICAGO 9, ILL.

SEALTITE
ESSENTIAL PRODUCTS

***Double-Life* FINISH—Sealed in Zinc**—Actual service tests reveal distinct economies are effected by specifying Sealtite Essential Products with Double-Life Hot-Dipped, sealed in zinc finish. Corrosion is retarded—the fasteners have much longer life and expensive replacements are eliminated. Protect your investment—*specify* Hot-Dipped Galvanized—Sealed in zinc.

LEWIS BOLT & NUT CO.
MINNEAPOLIS, MINNESOTA

Serving 72% OF AMERICA'S CLASS I RAILWAYS

WIRES AND CABLES BY OKONITE serve new Vista Dome cars

In its new Vista Dome cars, the C., B. & Q. realized that dependable lighting and air conditioning systems were essential to the comfort and luxury of its passengers. That's why cables and car wire by Okonite were installed by the car builders, The Budd Company.

There are many other important railroad applications in which the Okonite name means dependable transmission and distribution of electrical power and means long service life, as well. These include signal cables, CTC aerial cables, communication cables, battery cables, shop wiring and power circuits. For information on any railroad use, address The Okonite Company, Passaic, New Jersey.

OKONITE SINCE 1878

insulated wires and cables

6161